

CAREERS 360



CBSE Class 12

Computer Science Item Bank

Class: XII	
Subject: COMPUTER SCIENCE	
Q. No. 1	<p>Rohit, a student of class 12th, is learning CSV File Module in Python. During examination, he has been assigned an incomplete python code (shown below) to create a CSV File 'Student.csv' (content shown below). Help him in completing the code which creates the desired CSV File.</p> <p>CSV File 1,AKSHAY,XII,A 2,ABHISHEK,XII,A 3,ARVIND,XII,A 4,RAVI,XII,A 5,ASHISH,XII,A</p> <p>Incomplete Code</p> <pre>import _____ #Statement-1 fh = open(_____, _____, newline='') #Statement-2 stuwriter = csv._____ #Statement-3 data = [] header = ['ROLL_NO', 'NAME', 'CLASS', 'SECTION'] data.append(header) for i in range(5): roll_no = int(input("Enter Roll Number : ")) name = input("Enter Name : ") Class = input("Enter Class : ") section = input("Enter Section : ") rec = [_____] #Statement-4 data.append(rec) stuwriter. _____ (data) #Statement-5 fh.close()</pre>
i.	<p>Identify the suitable code for blank space in line marked as Statement-1.</p> <p>a) csv file b) CSV c) csv d) Csv</p> <p>Correct Answer : c) csv</p>
ii.	<p>Identify the missing code for blank space in line marked as Statement-2?</p> <p>a) "School.csv","w" b) "Student.csv","w" c) "Student.csv","r" d) "School.csv","r"</p> <p>Correct Answer : b) "Student.csv","w"</p>
iii.	<p>Choose the function name (with argument) that should be used in the blank space of line marked as Statement-3</p> <p>a) reader(fh) b) reader(MyFile) c) writer(fh) d) writer(MyFile)</p>

	Correct Answer : c) writer(fh)
iv.	<p>Identify the suitable code for blank space in line marked as Statement-4.</p> <p>a) 'ROLL_NO', 'NAME', 'CLASS', 'SECTION' b) ROLL_NO, NAME, CLASS, SECTION c) 'roll_no','name','Class','section' d) roll_no,name,Class,section c) co.connect()</p> <p>Correct Answer : d) roll_no,name,Class,section</p>
v.	<p>Choose the function name that should be used in the blank space of line marked as Statement-5 to create the desired CSV File?</p> <p>a) dump() b) load() c) writerows() d) writerow()</p> <p>Correct Answer : c) writerows()</p>
Q. No. 2	<p>Amritya Seth is a programmer, who has recently been given a task to write a python code to perform the following binary file operations with the help of two user defined functions/modules:</p> <ol style="list-style-type: none"> AddStudents() to create a binary file called STUDENT.DAT containing student information – roll number, name and marks (out of 100) of each student. GetStudents() to display the name and percentage of those students who have a percentage greater than 75. In case there is no student having percentage > 75 the function displays an appropriate message. The function should also display the average percent. <p>He has succeeded in writing partial code and has missed out certain statements, so he has left certain queries in comment lines. You as an expert of Python have to provide the missing statements and other related queries based on the following code of Amritya.</p> <p>Answer any four questions (out of five) from the below mentioned questions.</p> <pre>import pickle def AddStudents(): _____ #1 statement to open the binary file to write data while True: Rno = int(input("Rno :")) Name = input("Name : ") Percent = float(input("Percent :")) L = [Rno, Name, Percent] _____ #2 statement to write the list L into the file Choice = input("enter more (y/n): ") if Choice in "nN": break F.close()</pre>

	<pre> def GetStudents() : Total=0 Countrec=0 Countabove75=0 with open("STUDENT.DAT","rb") as F: while True: try: _____ #3 statement to read from the file Countrec+=1 Total+=R[2] if R[2] > 75: print(R[1], " has percent = ",R[2]) Countabove75+=1 except: break if Countabove75==0: print("There is no student who has percentage more than 75") average=Total/Countrec print("average percent of class = ",average) AddStudents() GetStudents() </pre>
i.	<p>Which of the following commands is used to open the file "STUDENT.DAT" for writing only in binary format? (marked as #1 in the Python code)</p> <p>a. F= open("STUDENT.DAT",'wb')</p> <p>b. F= open("STUDENT.DAT",'w')</p> <p>c. F= open("STUDENT.DAT",'wb+')</p> <p>d. F= open("STUDENT.DAT",'w+')</p> <p>Correct Answer : a. F= open("STUDENT.DAT",'wb')</p>
ii.	<p>Which of the following commands is used to write the list L into the binary file, STUDENT.DAT? (marked as #2 in the Python code)</p> <p>a. pickle.write(L,f)</p> <p>b. pickle.write(f, L)</p> <p>c. pickle.dump(L,F)</p> <p>d. f=pickle.dump(L)</p> <p>Correct Answer : c. pickle.dump(L,F)</p>
iii.	<p>Which of the following commands is used to read each record from the binary file STUDENT.DAT? (marked as #3 in the Python code)</p> <p>a. R = pickle.load(F)</p> <p>b. pickle.read(r,f)</p> <p>c. r= pickle.read(f)</p> <p>d. pickle.load(r,f)</p> <p>Correct Answer : a. R = pickle.load(F)</p>
iv.	<p>Which of the following statement(s) are correct regarding the file access modes?</p>

	<p>a. 'r+' opens a file for both reading and writing. File object points to its beginning.</p> <p>b. 'w+' opens a file for both writing and reading. Adds at the end of the existing file if it exists and creates a new one if it does not exist.</p> <p>c. 'wb' opens a file for reading and writing in binary format. Overwrites the file if it exists and creates a new one if it does not exist.</p> <p>d. 'a' opens a file for appending. The file pointer is at the start of the file if the file exists.</p> <p>Correct Answer : a</p>
v.	<p>Which of the following statements correctly explain the function of seek() method?</p> <p>a. tells the current position within the file.</p> <p>b. determines if you can move the file position or not.</p> <p>c. indicates that the next read or write occurs from that position in a file.</p> <p>d. moves the current file position to a given specified position</p> <p>Correct Answer : d</p>
Q. No. 3	<p>Krrishnav is looking for his dream job but has some restrictions. He loves Delhi and would take a job there if he is paid over Rs.40,000 a month. He hates Chennai and demands at least Rs. 1,00,000 to work there. In any another location he is willing to work for Rs. 60,000 a month. The following code shows his basic strategy for evaluating a job offer.</p> <p>Code:</p> <pre> pay= _____ location= _____ if location == "Mumbai": print ("I'll take it!") #Statement 1 elif location == "Chennai": if pay < 100000: print ("No way") #Statement 2 else: print("I am willing!") #Statement 3 elif location == "Delhi" and pay > 40000: print("I am happy to join") #Statement 4 elif pay > 60000: print("I accept the offer") #Statement 5 else: print("No thanks, I can find something better") #Statement 6 </pre> <p>On the basis of the above code, choose the right statement which will be executed when different inputs for pay and location are given.</p>
i.	<p>Input: location = "Chennai", pay = 50000</p> <p>a. Statement 1</p> <p>b. Statement 2</p> <p>c. Statement 3</p> <p>d. Statement 4</p>

	Correct Answer : ii. Statement 2
ii.	<p>Input: location = "Surat" ,pay = 50000</p> <p>a. Statement 2</p> <p>b. Statement 4</p> <p>c. Statement 5</p> <p>d. Statement 6</p> <p>Correct Answer: d. Statement 6</p>
iii.	<p>Input- location = "Any Other City", pay = 1</p> <p>a Statement 1</p> <p>b. Statement 2</p> <p>c. Statement 4</p> <p>d. Statement 6</p> <p>Correct Answer: d. Statement 6</p>
iv.	<p>Input location = "Delhi", pay = 500000</p> <p>a. Statement 6</p> <p>b. Statement 5</p> <p>c. Statement 4</p> <p>d. Statement 3</p> <p>Correct Answer: c. Statement 4</p>
v.	<p>v. Input- location = "Lucknow", pay = 65000</p> <p>i. Statement 2</p> <p>ii. Statement 3</p> <p>iii. Statement 4</p> <p>iv. Statement 5</p> <p>Correct Answer: d. Statement 5</p>
Q. No. 4	<p>Consider the following code and answer the questions that follow:</p> <pre>Book={1:'Thriller', 2:'Mystery', 3:'Crime', 4:'Children Stories'}</pre> <pre>Library ={'5':'Madras Diaries','6':'Malgudi Days'}</pre>
i.	<p>Ramesh needs to change the title in the dictionary book from 'Crime' to 'Crime Thriller'. He has written the following command:</p> <pre>Book['Crime']='Crime Thriller'</pre> <p>But he is not getting the answer. Help him choose the correct command:</p> <p>a. Book[2]='Crime Thriller'</p> <p>b. Book[3]='Crime Thriller'</p> <p>c. Book[2]='Crime Thriller'</p> <p>d. Book[3]='Crime Thriller'</p> <p>Correct Answer: b</p>
ii.	<p>The command to merge the dictionary Book with Library the command would be:</p> <p>a. d=Book+Library</p> <p>b. print(Book+Library)</p> <p>c. Book.update(Library)</p>

	<p>d. <code>Library.update(Book)</code> Correct Answer: d</p>																								
iii.	<p>What will be the output of the following line of code: <code>print(list(Library))</code> a. <code>['5','Madras Diaries','6','Malgudi Days']</code> b. <code>('5','Madras Diaries','6','Malgudi Days')</code> c. <code>['Madras Diaries','Malgudi Days']</code> d. <code>['5','6']</code> Correct Answer: d</p>																								
iv.	<p>In order to check whether the key 2 is present in the dictionary Book, Ramesh uses the following command: <code>2 in Book</code> He gets the answer 'True'. Now to check whether the name 'Madras Diaries' exists in the dictionary Library, he uses the following command: <code>'Madras Diaries' in Library</code> But he gets the answer as 'False'. Select the correct reason for this: a. We cannot use the in function with values. It can be used with keys only. b. We must use the function <code>Library.values()</code> along with the in operator c. We can use the <code>Library.items()</code> function instead of the in operator d. Both b and c above are correct. Correct Answer: b</p>																								
v.	<p>With reference to the above declared dictionaries, predict the output of the following code fragments</p> <table border="1"> <thead> <tr> <th>Code 1</th><th>Code 2</th></tr> </thead> <tbody> <tr> <td><code>Library=Book</code></td><td><code>Library=Book.copy()</code></td></tr> <tr> <td><code>Library.pop(2)</code></td><td><code>Library.pop(2)</code></td></tr> <tr> <td><code>print(Library)</code></td><td><code>print(Library)</code></td></tr> <tr> <td><code>print(Book)</code></td><td><code>print(Book)</code></td></tr> </tbody> </table> <p>a)</p> <table border="1"> <thead> <tr> <th>Code 1</th><th>Code 2</th></tr> </thead> <tbody> <tr> <td><code>{1: 'Thriller', 2: 'Mystery', 3: 'Crime', 4: 'Children Stories'}</code></td><td><code>{1: 'Thriller', 3: 'Crime', 4: 'Children Stories'}</code></td></tr> <tr> <td><code>{1: 'Thriller', 2: 'Mystery', 3: 'Crime', 4: 'Children Stories'}</code></td><td><code>{1: 'Thriller', 3: 'Crime', 4: 'Children Stories'}</code></td></tr> </tbody> </table> <p>b)</p> <table border="1"> <thead> <tr> <th>Code 1</th><th>Code 2</th></tr> </thead> <tbody> <tr> <td><code>{2:'Mystery'}</code></td><td><code>{1: 'Thriller', 3: 'Crime', 4: 'Children Stories'}</code></td></tr> <tr> <td><code>{1: 'Thriller', 2: 'Mystery', 3: 'Crime', 4: 'Children Stories'}</code></td><td><code>{1: 'Thriller', 3: 'Crime', 4: 'Children Stories'}</code></td></tr> </tbody> </table> <p>c)</p> <table border="1"> <thead> <tr> <th>Code 1</th><th>Code 2</th></tr> </thead> <tbody> </tbody> </table>	Code 1	Code 2	<code>Library=Book</code>	<code>Library=Book.copy()</code>	<code>Library.pop(2)</code>	<code>Library.pop(2)</code>	<code>print(Library)</code>	<code>print(Library)</code>	<code>print(Book)</code>	<code>print(Book)</code>	Code 1	Code 2	<code>{1: 'Thriller', 2: 'Mystery', 3: 'Crime', 4: 'Children Stories'}</code>	<code>{1: 'Thriller', 3: 'Crime', 4: 'Children Stories'}</code>	<code>{1: 'Thriller', 2: 'Mystery', 3: 'Crime', 4: 'Children Stories'}</code>	<code>{1: 'Thriller', 3: 'Crime', 4: 'Children Stories'}</code>	Code 1	Code 2	<code>{2:'Mystery'}</code>	<code>{1: 'Thriller', 3: 'Crime', 4: 'Children Stories'}</code>	<code>{1: 'Thriller', 2: 'Mystery', 3: 'Crime', 4: 'Children Stories'}</code>	<code>{1: 'Thriller', 3: 'Crime', 4: 'Children Stories'}</code>	Code 1	Code 2
Code 1	Code 2																								
<code>Library=Book</code>	<code>Library=Book.copy()</code>																								
<code>Library.pop(2)</code>	<code>Library.pop(2)</code>																								
<code>print(Library)</code>	<code>print(Library)</code>																								
<code>print(Book)</code>	<code>print(Book)</code>																								
Code 1	Code 2																								
<code>{1: 'Thriller', 2: 'Mystery', 3: 'Crime', 4: 'Children Stories'}</code>	<code>{1: 'Thriller', 3: 'Crime', 4: 'Children Stories'}</code>																								
<code>{1: 'Thriller', 2: 'Mystery', 3: 'Crime', 4: 'Children Stories'}</code>	<code>{1: 'Thriller', 3: 'Crime', 4: 'Children Stories'}</code>																								
Code 1	Code 2																								
<code>{2:'Mystery'}</code>	<code>{1: 'Thriller', 3: 'Crime', 4: 'Children Stories'}</code>																								
<code>{1: 'Thriller', 2: 'Mystery', 3: 'Crime', 4: 'Children Stories'}</code>	<code>{1: 'Thriller', 3: 'Crime', 4: 'Children Stories'}</code>																								
Code 1	Code 2																								

	<table> <tr> <td>{1: 'Thriller', 3: 'Crime', 4: 'Children Stories'}</td><td>{1: 'Thriller', 3: 'Crime', 4: 'Children Stories'}</td></tr> <tr> <td>{1: 'Thriller', 3: 'Crime', 4: 'Children Stories'}</td><td>{1: 'Thriller', 2: 'Mystery', 3: 'Crime', 4: 'Children Stories'}</td></tr> </table>	{1: 'Thriller', 3: 'Crime', 4: 'Children Stories'}	{1: 'Thriller', 3: 'Crime', 4: 'Children Stories'}	{1: 'Thriller', 3: 'Crime', 4: 'Children Stories'}	{1: 'Thriller', 2: 'Mystery', 3: 'Crime', 4: 'Children Stories'}		
{1: 'Thriller', 3: 'Crime', 4: 'Children Stories'}	{1: 'Thriller', 3: 'Crime', 4: 'Children Stories'}						
{1: 'Thriller', 3: 'Crime', 4: 'Children Stories'}	{1: 'Thriller', 2: 'Mystery', 3: 'Crime', 4: 'Children Stories'}						
d)	<table> <tr> <td>Code 1</td><td>Code 2</td></tr> <tr> <td>{1: 'Thriller', 3: 'Crime', 4: 'Children Stories'}</td><td>{1: 'Thriller', 3: 'Crime', 4: 'Children Stories'}</td></tr> <tr> <td>{1: 'Thriller', 2: 'Mystery', 3: 'Crime', 4: 'Children Stories'}</td><td>{1: 'Thriller', 3: 'Crime', 4: 'Children Stories'}</td></tr> </table>	Code 1	Code 2	{1: 'Thriller', 3: 'Crime', 4: 'Children Stories'}	{1: 'Thriller', 3: 'Crime', 4: 'Children Stories'}	{1: 'Thriller', 2: 'Mystery', 3: 'Crime', 4: 'Children Stories'}	{1: 'Thriller', 3: 'Crime', 4: 'Children Stories'}
Code 1	Code 2						
{1: 'Thriller', 3: 'Crime', 4: 'Children Stories'}	{1: 'Thriller', 3: 'Crime', 4: 'Children Stories'}						
{1: 'Thriller', 2: 'Mystery', 3: 'Crime', 4: 'Children Stories'}	{1: 'Thriller', 3: 'Crime', 4: 'Children Stories'}						
Correct Answer: c							

Q. No. 5

In a Database, there are two tables with the instances given below:

Table: STUDENTS

ADMNO	NAME	CLASS	SEC	RNO	ADDRESS	PHONE
1211	MEENA	12A	D	4	A-26	3245678
1212	VANI	10A	D	1	B-25	5456789
1213	MEENA	12B	A	1	NULL	NULL
1214	KARISH	10B	B	3	AB-234	4567890

Table: SPORTS

ADMNO	GAME	COACHNAME	GRADE
1215	CRICKET	MR. RAVI	A
1213	VOLLEYBALL	MR. AMANDEEP	B
1211	VOLLEYBALL	MR. GOVARDHAN	A
1212	BASKET BALL	MR TEWARI	B

i.

Choose the command to display name and game of those students whose address is available in students' table.

a.

SELECT NAME, GAME FROM STUDENTS, SPORTS WHERE STUDENTS.ADMNO=SPORTS.ADMNO AND ADDRESS IS NOT NULL;

b.

SELECT NAME, GAME FROM STUDENTS, SPORTS WHERE STUDENTS.ADMNO=SPORTS.ADMNO AND ADDRESS IS NULL;

c.


SELECT NAME, GAME FROM STUDENTS, SPORTS WHERE STUDENTS.ADMNO=SPORTS.ADMNO, ADDRESS IS NULL;

d.

SELECT NAME, GAME FROM STUDENTS, SPORTS WHERE STUDENTS.ADMNO=SPORTS.ADMNO NOT ADDRESS IS NULL;

	<p>Correct Answer:</p> <p>a. SELECT NAME, GAME FROM STUDENTS, SPORTS WHERE STUDENTS.ADMNO=SPORTS.ADMNO AND ADDRESS IS NOT NULL;</p>
ii.	<p>Identify the statement to delete a column phone from the table students.</p> <p>a. ALTER TABLE STUDENTS DROP PHONE; b. DROP PHONE; c. UPDATE DROP PHONE; d. DELETE FROM STUDENTS WHERE DROP PHONE;</p> <p>Correct Answer: a. ALTER TABLE STUDENTS DROP PHONE;</p>
iii.	<p>Choose the command to display Name of the students who are studying in class 12 and their corresponding Coach names</p> <p>a. SELECT NAME, COACHNAME FROM STUDENTS, SPORTS WHERE CLASS LIKE "12%" AND STUDENTS.ADMNO=SPORTS.ADMNO; b. SELECT NAME, COACHNAME FROM STUDENTS, SPORTS WHERE CLASS LIKE "12%" AND STUDENTS.ADMNO=SPORTS.ADMNO; c. SELECT NAME, COACHNAME FROM STUDENTS, SPORTS WHERE CLASS LIKE "12%" AND ADMNO.STUDENTS=ADMNO.SPORTS; d. SELECT NAME, COACHNAME FROM STUDENTS, SPORTS WHERE CLASS LIKE= "12%" AND STUDENTS.ADMNO=SPORTS.ADMNO;</p> <p>Correct Answer: a. SELECT NAME, COACHNAME FROM STUDENTS,SPORTS WHERE CLASS LIKE "12%" AND STUDENTS.ADMNO=SPORTS.ADMNO ;</p>
iv.	<p>which two select queries will give the same output</p> <p>A. SELECT NAME, GRADE FROM STUDENTS,SPORTS WHERE ADDRESS IS NULL AND STUDENTS.ADMNO =SPORTS.ADMNO ; B. SELECT NAME, GRADE FROM STUDENTS,SPORTS WHERE ADDRESS IS NOT NULL AND STUDENTS.ADMNO =SPORTS.ADMNO ; C SELECT NAME, GRADE FROM STUDENTS,SPORTS WHERE ADDRESS IS NULL OR STUDENTS.ADMNO=SPORTS.ADMNO ; D. SELECT ST.NAME, SP.GRADE FROM STUDENTS ST,SPORTS SP WHERE ADDRESS IS NULL AND ST.ADMNO=SP.ADMNO ;</p> <p>a. A AND B b. B AND C c. A AND D d. C AND D</p> <p>Correct Answer: c. A AND D</p>

v.	<p>Choose the command to count the number of students who play volleyball</p> <p>a. SELECT COUNT(*) FROM STUDENTS,SPORTS WHERE GAME="VOLLEYBALL" AND STUDENTS.ADMNO=SPORTS.ADMNO ;</p> <p>b. SELECT COUNT(GAME) FROM STUDENTS,SPORTS WHERE GAME="VOLLEYBALL" AND STUDENTS.ADMNO=SPORTS.ADMNO ;</p> <p>c. SELECT COUNT(*) FROM STUDENTS,SPORTS WHERE GAME="VOLLEYBALL" ;</p> <p>d. SELECT COUNT(*) FROM STUDENTS,SPORTS WHERE SPORTS="VOLLEYBALL" AND STUDENTS.ADMNO=SPORTS.ADMNO</p> <p>Correct Answer :</p> <p>a. SELECT COUNT(*) FROM STUDENTS,SPORTS WHERE GAME="VOLLEYBALL" AND STUDENTS.ADMNO=SPORTS.ADMNO ;</p>
----	---

Q. No. 6	<p>A company ABC Enterprises has four blocks of buildings as shown:</p>  <p>Center to center distance between various blocks</p> <table border="1"> <tbody> <tr> <td>B3 TO B1</td><td>50 M</td></tr> <tr> <td>B1 TO B2</td><td>60 M</td></tr> <tr> <td>B2 TO B4</td><td>25 M</td></tr> <tr> <td>B4 TO B3</td><td>170 M</td></tr> <tr> <td>B3 TO B2</td><td>125 M</td></tr> <tr> <td>B1 TO B4</td><td>90 M</td></tr> </tbody> </table> <p>Number of computers in each block :</p> <table border="1"> <tbody> <tr> <td>B1</td><td>150 M</td></tr> <tr> <td>B2</td><td>15 M</td></tr> <tr> <td>B3</td><td>15 M</td></tr> <tr> <td>B4</td><td>25 M</td></tr> </tbody> </table> <p>Computers in each block are networked but blocks are not networked. The company has now decided to connect the blocks also.</p>	B3 TO B1	50 M	B1 TO B2	60 M	B2 TO B4	25 M	B4 TO B3	170 M	B3 TO B2	125 M	B1 TO B4	90 M	B1	150 M	B2	15 M	B3	15 M	B4	25 M
B3 TO B1	50 M																				
B1 TO B2	60 M																				
B2 TO B4	25 M																				
B4 TO B3	170 M																				
B3 TO B2	125 M																				
B1 TO B4	90 M																				
B1	150 M																				
B2	15 M																				
B3	15 M																				
B4	25 M																				
i.	<p>Suggest the most appropriate topology for the connections between the blocks.</p> <p>a. Ring topology</p> <p>b. Star topology</p> <p>c. Mesh topology</p> <p>d. Bus topology</p>																				

	Correct Answer: b. Star topology
ii.	<p>The company wants internet accessibility in all the blocks. The suitable and cost-effective technology for that would be:</p> <ul style="list-style-type: none"> a. Satellite b. Lease line c. Telephone line d. Broadband <p>Correct Answer: d. Broadband</p>
iii.	<p>Which one of the following devices will you suggest for connecting all the computers with in each of their blocks?</p> <ul style="list-style-type: none"> a. Switch/Hub b. Modem c. Telephone d. Repeater <p>Correct Answer: a. Switch/Hub</p>
iv.	<p>The company is planning to link its head office situated in New Delhi with the offices in hilly areas. Suggest a way to connect it economically:</p> <ul style="list-style-type: none"> a. Micro waves b. Coaxial cable c. Fibre optic d. Radio waves <p>Correct Answer: d. Radio waves</p>
v.	<p>Suggest the most appropriate location of the server, to get the best connectivity for maximum number of computers.</p> <ul style="list-style-type: none"> a. BLOCK B2 b. BLOCK B1 c. BLOCK B4 d. BLOCK B3 <p>Correct Answer: b. BLOCK B1</p>
Q. No. 7	<p>Millions of computer science students have taken a course on algorithms and data structures, typically the second course after the initial one introducing programming. One of the basic data structures in such a course is the stack. The stack has a special place in the emergence of computing as a science, as argued by Michael Mahoney, the pioneer of the history of the theory of computing. The Stack can be used in many computer applications, few are given below:</p> <ul style="list-style-type: none"> a) In recursive function b) When function is called. c) Expression conversion such as – Infix to Postfix, Infix to Prefix, Postfix to Infix, Prefix to Infix. <p>In Stack, insertion operation is known as Push whereas deletion operation is known as Pop.</p> <p>Code – 1</p>

	<pre> def push(Country,N): Country._____(len(Country),N) #Statement 1 #Function Calling Country=[] C=['Indian', 'USA', 'UK', 'Canada', 'Sri Lanka'] for i in range(0,len(C),_____): #Statement 2 push(Country,C[i]) print(Country) Required Output: ['Indian', 'UK', 'Sri Lanka'] Code - 2 def pop(Country): if _____: #Statement 3 return "Under flow" else: return Country._____() #Statement 4 #Function Calling for i in range(len(Country)+1): print(_____) #Statement 5 Required Output: Sri Lanka UK India Under flow Fill the above statement based on given questions: </pre>
i.	<p>Identify the suitable code for the blank of statement 1.</p> <ol style="list-style-type: none"> .append() .insert() .extend() .append(len(Country),N) <p>Correct Answer : b. .insert()</p>
ii.	<p>Fill the statement 2, to insert the alternate element from Country list.</p> <ol style="list-style-type: none"> 3 0 -1 2 <p>Correct Answer : d. 2</p>
iii.	<p>Fill the statement 3, to check the stack is empty.</p> <ol style="list-style-type: none"> Country=[] Country.isEmpty() len(country)==0 No of the above

	Correct Answer : c. len(country)==0
iv.	<p>Fill the statement 4, to delete an element from the stack.</p> <p>a. pop(1) b. pop() c. del country[1] d. Country.delete(1)</p> <p>Correct Answer: b. pop()</p>
v.	<p>Fill the statement 5, to call the pop function.</p> <p>a. pop(C) b. pop(Country) c. call pop(Country) d. def pop(Country)</p> <p>Correct Answer: b. pop(Country)</p>
Q. No. 8	<p>Arun, during Practical Examination of Computer Science, has been assigned an incomplete search() function to search in a pickled file student.dat. The File student.dat is created by his Teacher and the following information is known about the file.</p> <ul style="list-style-type: none"> • File contains details of students in [roll_no,name,marks] format. • File contains details of 10 students (i.e. from roll_no 1 to 10) and separate list of each student is written in the binary file using dump(). <p>Arun has been assigned the task to complete the code and print details of roll number 1.</p> <pre>def search(): f = open("student.dat",____) #Statement-1 ____: #Statement-2 while True: rec = pickle.____ #Statement-3 if(____): #Statement-4 print(rec) except: pass ____ #Statement-5</pre>
i.	<p>In which mode Arun should open the file in Statement-1?</p> <p>a) r b) r+ c) rb d) wb</p> <p>Correct Answer: c) rb</p>
ii.	<p>Identify the suitable code to be used at blank space in line marked as Statement-2</p> <p>a) if(rec[0]==1)</p>

	<p>b) for i in range(10) c) try d) pass</p> <p>Correct Answer: c) try</p>
iii.	<p>Identify the function (with argument), to be used at blank space in line marked as Statement-3.</p> <p>a) load() b) load(student.dat) c) load(f) d) load(fin)</p> <p>Correct Answer: c) load(f)</p>
iv.	<p>What will be the suitable code for blank space in line marked as Statement-4.</p> <p>a) rec[0]==2 b) rec[1]==2 c) rec[2]==2 d) rec[0]==1</p> <p>Correct Answer: d) rec[0]==1</p>
v.	<p>Which statement Arun should use at blank space in line marked as Statement-4 to close the file.</p> <p>a) file.close() b) close(file) c) f.close() d) close()</p> <p>Correct Answer: c) f.close()</p>
Q. No. 9	<p>Radha Shah is a programmer, who has recently been given a task to write a python code to perform the following CSV file operations with the help of two user defined functions/modules:</p> <p>a. CSVOpen() : to create a CSV file called BOOKS.CSV in append mode containing information of books – Title, Author and Price. b. CSVRead() : to display the records from the CSV file called BOOKS.CSV where the field title starts with 'R'. She has succeeded in writing partial code and has missed out certain statements, so she has left certain queries in comment lines.</p> <pre>import csv def CSVOpen(): with open('books.csv','_____',newline='') as csvf: #Statement-1 cw=_____ #Statement-2 _____ #Statement-3 cw.writerow(['Rapunzel','Jack',300]) cw.writerow(['Barbie','Doll',900]) cw.writerow(['Johnny','Jane',280]) def CSVRead():</pre>

	<pre> try: with open('books.csv','r') as csvf: cr=_____ #Statement-4 for r in cr: if _____: #Statement-5 print(r) except: print('File Not Found') </pre> <p> CSVOpen() CSVRead() </p> <p> You as an expert of Python have to provide the missing statements and other related queries based on the following code of Radha. Answer any four questions (out of five) from the below mentioned questions. </p>
i.	<p>Choose the appropriate mode in which the file is to be opened in append mode (Statement 1)</p> <p> a. w+ b. ab c. r+ d. a </p> <p>Correct Answer: d. a</p>
ii.	<p>Which statement will be used to create a csv writer object in Statement 2.</p> <p> a. csv.writer(csvf) b. csv.writer(csvf) c. csvf.writer() d. cs.writer(csvf) </p> <p>Correct Answer: b. csv.writer(csvf)</p>
iii.	<p>Choose the correct option for Statement 3 to write the names of the column headings in the CSV file, BOOKS.CSV.</p> <p> a. cw.writerow('Title','Author','Price') b. cw.writerow(['Title','Author','Price']) c. cw.writerows('Title','Author','Price') d. cw.writerows(['Title','Author','Price']) </p> <p>Correct Answer: b. cw.writerow(['Title','Author','Price'])</p>
iv.	<p>Which statement will be used to read a csv file in Statement 4.</p> <p> a. cs.read(csvf) b. csv.reader(csvf) c. csvf.read() d. csvf.reader(cs) </p> <p>Correct Answer: b. csv.reader(csvf)</p>
v.	<p>Fill in the appropriate statement to check the field Title starting with 'R' for Statement 5 in the above program.</p> <p> a. r[0][0]=='R' b. r[1][0]=='R' c. r[0][1]=='R' </p>

	<p>d. d) r[1][1]=='R'</p> <p>Correct Answer: a. r[0][0]=='R'</p>
Q. No. 10	<p>Ankita is writing a program to perform some operations in Queue. She has created three Insert_in_Queue(Student), Delete_from_Queue(Student) and Print_Queue(Student) methods/functions in Python to add a new Student name, delete a Student name and print list of student from a queue, considering them to act as insert, delete and print operations of the Queue data structure. She is not getting the desired result. Help her to get the desired result from the given python code.</p> <pre>def Insert_in_Queue(queue): a=input("enter student name: ") queue._____ # Statement-1 def Delete_from_Queue (queue): if (_____): # Statement-2 print("Queue empty") else: print("Deleted element is: ",queue[0]) del queue[___] #Statement-3 def Print_Queue(queue): if not _____: #Statement-4 print(queue[___:___]) # Statement-5</pre>
i.	<p>What Ankita should write to complete the Statement-1 to store the student name?</p> <p>a. queue.append(a) b. queue=append(a) c. queue.append=a d. append(a).queue</p> <p>Correct Answer: a queue.append(a)</p>
ii.	<p>Fill in the blank in Statement-2 to check whether the queue is empty or not?</p> <p>a. isEmpty(Queue) b. isEmpty(q) c. Queue.isEmpty d. Empty.Queue</p> <p>Correct Answer: a isEmpty(Queue)</p>
iii.	<p>iii. Fill in the blank in Statement-3 with index number.</p> <p>a. delete(0) b. del queue[0] c. delete.queue(0) d. queue.delete[0]</p> <p>Correct Answer: b) del queue[0]</p>
iv.	<p>Select the correct option to complete the statement at statement-4.</p> <p>a. isEmpty() b. Empty() c. len() = 0</p>

	<p>d. not Empty</p> <p>Correct Answer : a isEmpty()</p>
v.	<p>Specify the range to print all queue elements in statement-5?</p> <p>a. print(queue=[0:len=(queue)])</p> <p>b. print(queue[0:len(queue)])</p> <p>c. print(queue[[0:len]])</p> <p>d. print(queue[0=len(queue)])</p> <p>Correct Answer : b. print(queue[0:len(queue)])</p>
Q. No. 11	<p>Priyank is a software developer with a reputed firm. He has been given the task to computerise the operations for which he is developing a form which will accept customer data as follows:</p>
	<p>i. The DATA TO BE ENTERED IS :</p> <p>a. Name</p> <p>b. Age</p> <p>c. Items bought(all the items that the customer bought)</p> <p>d. Bill amount</p> <p>Correct Answer :</p>
	<p>i. Choose the most appropriate data type to store the above information in the given sequence.</p> <p>a. string, tuple, float, integer</p> <p>b. string, integer, dictionary, float</p> <p>c. string, integer, integer, float</p> <p>d. string, integer, list, float</p> <p>Correct Answer :</p>
	<p>ii. Now the data of each customer needs to be organised such that the customer can be identified by name followed by the age, item list and bill amount. Choose the appropriate data type that will help Priyank accomplish this task.</p> <p>a. List</p> <p>b. Dictionary</p> <p>c. Nested Dictionary</p> <p>d. Tuple</p> <p>Correct Answer :</p>
	<p>iii. Which of the following is the correct way of storing information of customers named 'Paritosh' and 'Bhavesh' with respect to the option chosen above?</p> <p>a. a.customers= {'Paritosh':24,['Printed Paper', ' Penstand'], 3409, 'Bhavesh': 45,['A4 Rim','Printer Cartridge', 'Pen Carton', 'Gift Wrap'], 8099.99 }</p> <p>b. customers={'Paritosh':[24,['Printed Paper', ' Penstand'], 3409], 'Bhavesh': [45,['A4 Rim','Printer Cartridge', 'Pen Carton', 'Gift Wrap'], 8099.99] }</p>

	<p>c. c.customers= ['Paritosh':24,'Printed Paper', ' Penstand', 3409, 'Bhavesh': 45,'A4 Rim','Printer Cartridge', 'Pen Carton', 'Gift Wrap', 8099.99]</p> <p>d. customers=('Paritosh':24,['Printed Paper', ' Penstand'], 3409, 'Bhavesh': 45,['A4 Rim','Printer Cartridge', 'Pen Carton', 'Gift Wrap'], 8099.99)</p> <p>Correct Answer :</p>
	<p>iv. In order to calculate the total bill amount for 15 customers, Priyank</p> <p>Statement 1. must use a variable of the type float to store the sum.</p> <p>Statement 2. may use a loop to iterate over the values</p> <p>a. Both statements are correct.</p> <p>b. Statement 1 is correct, but statemnt 2 is not.</p> <p>c. Both statements ar incorrect.</p> <p>d. Statement 1 is incorrect but statement 2 is correct.</p> <p>Correct Answer :</p>
Q. No. 12	<p>Your teacher has given you a method/function FilterWords() in python which read lines from a text file NewsLetter.TXT, and display those words, which are lesser than 4 characters. Your teachers intentionally kept few blanks in between the code and asked you to fill the blanks so that the code will run to find desired result. Do the needful with the following python code.</p> <pre>def FilterWords(): c=0 file=open('NewsLetter.TXT', '____') #Statement-1 line = file.____ #Statement-2 word = ____ #Statement-3 for c in word: if ____: #Statement-4 print(c) ____ #Statement-5</pre> <p>FilterWords()</p>
i.	<p>Write mode of opening the file in statement-1?</p> <p>a. a</p> <p>b. ab</p> <p>c. w</p> <p>d. r</p> <p>Correct Answer: d. r</p>
ii.	<p>Fill in the blank in statement-2 to read the data from the file.</p> <p>a. File.Read()</p> <p>b. file.read()</p> <p>c. read.lines()</p> <p>d. readlines()</p> <p>Correct Answer: b. file.read()</p>
iii.	<p>Fill in the blank in statement-3 to read data word by word.</p> <p>a. Line.Split()</p>

	b. Line.split() c. line.split() d. split.word() Correct Answer: c. line.split()
iv.	Fill in the blank in statement-4, which display the word having lesser than 4 characters. a. len(c) ==4 b. len(c)<4 c. len ()= =3 d. len ()==3 Correct Answer: b. len(c)<4
v.	Fill in the blank in Statement-5 to close the file. a. file.close() b. File.Close() c. Close() d. end() Correct Answer: a. file.close()