



SINo	Question	Option A	Option B	Option C	Option D	Answer	Max Marks	Negative Marks
1	You are required to print the negative number into brackets instead of minus sign (e.g., -3998 is (3998)). Let a=-3998	<pre><pre>if (a<0){ System.out.print("("+(2*a)+");" } </pre></pre>	<pre><pre>if (a < 0){ System.out.print("(" + Math.abs(a) + ");" }</pre></pre>	<pre><pre>if (a < 0){ System.out.print(a.toString().replace("-", "")); }</pre></pre>	All of the above	D	2	0.5
2	Consider the following table created in MSSQL server 2008: TblTrn_DMT(Name, Desgnation, DateOfJoining, Remarks), all columns having nvarchar(100) datatype. You are required to fetch records having DateOfJoining less than and equal to '03/12/2016'. Record Should be in descending order by DateOfJoining. Which one is correct:	SELECT * FROM [TblTrn_DMT] where DateOfJoining<'04/12/2016' order by DateOfJoining DESC;	SELECT * FROM [TblTrn_DMT] where CONVERT((DateTime, DateOfJoining,108)<='03/12/2016' order by CONVERT(DateTime, DateOfJoining,108) DESC;	SELECT * FROM [TblTrn_DMT] where DateOfJoining <='03/12/2016' order by CONVERT(Date, DateOfJoining,108) DESC;	SELECT * FROM [TblTrn_DMT] where CONVERT(DateTime, DateOfJoining,103) <= CONVERT (DateTime, '03/12/2016',103) ORDER BY CONVERT(DateTime, DateOfJoining,103) DESC;	D	4	1
3	You are designing a distributed application. The application must store secure information that is specific to an individual user. The data must be automatically purged when the user logs off. You need to save transient information in a secure data store. Which data store should you use?	Session state	Database storage	Temp of the file system	Application state	A	2	0.5
4	which among the following is the correct standard for internationalization and localization in a java Application	i18n l10n	i7n l10n	i18n l8n	i18n l32n	A	2	0.5
5	What is the output of the short program below? <pre>import java.util.Date; class Program { public static String Time; public static Date time= new Date(); public static void main(String[] args) { System.out.println(Time == null ? "Time is null" : Time); System.out.println(time == null ? "time is null" : time); } }</pre>	<pre><pre> Time is null 1/1/2016 12:00:00 AM </pre></pre>	<pre><pre> Time is null null 1/1/2016 12:00:00 AM </pre></pre>	<pre><pre> Error 0 Error </pre></pre>	<pre><pre> Error 0 </pre></pre>	A	2	0.5
6	Which of the following statement is true about InputStreamReader ?	InputStreamReader is input stream that translate character to String	InputStreamReader is input stream that translate character to byte	InputStreamReader is input stream that translate byte to character	InputStreamReader is input stream that translate byte to bit	C	2	0.5
7	<pre>String strOriginal = "She sells sea shells on the seashore" String srchString = "sea" int count=0; Pattern rex = Pattern.compile(srchString) while (rex.matcher(strOriginal).find()) count++; System.out.println(count); </pre> What will be the output?	2	1	It will not give error because rex variable should be define as System.RegularExpression.Regex	None of the above	A	2	0.5
8	What is the output of the short program below? <pre>class programe { static String Time; static Date time; public static void main (String[] args) throws java.lang.Exception { System.out.println(Time == null ? "Time is null" : Time); System.out.println(time == null ? "time is null" : time.toString()); } }</pre>	<pre><pre> Time is null time is null </pre></pre>	<pre><pre> Time is null null 1/1/0001 12:00:00 AM </pre></pre>	<pre><pre>Compile Time Error </pre></pre>	<pre><pre> Error 0 </pre></pre>	A	2	0.5



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9	What will be the output of the code given below? <pre>public static void main (String[] args) throws java.lang.Exception { int num = 1, z = 5; if (!(num <= 0)) System.out.println(++num + z++ + " " + ++z); else System.out.println(--num + z-- + " " + --z); } </pre>	5 6	6 5	6 6	7 7	D	2	0.5
10	What will be the output of the code given below? <pre>int i, j = 1, k; for (i = 0; i < 5; i++) { k = j++ + ++j; System.out.println(k + " "); } </pre>	8 4 16 12 20	4 8 12 16 20	4 8 16 32 64	2 4 6 8 10	B	2	0.5
11	What does get(int index) method define by List interface do ?	returns object stored at the specified index	returns object at the specified memory cell	returns a list containing elements between specified index and end in the collection	returns a list containing elements between first and end in the collection	A	2	0.5
12	Identify the type of sorting code below? <pre>func sort(var a as array) for i from 1 to N for j from 0 to N - 1 if a[j] > a[j + 1] swap(a[j], a[j + 1]) end func</pre>	Insertion Sort	Merge Sort	Radix Sort	Bubble Sort	D	2	0.5
13	What is the output of the following code ? <pre>import java.io.IOException; class Main{ public static void main(String[] args)throws IOException { m(); System.in.read(); } private static void m() { System.out.println("HI"); m(); } } </pre>	HI HI HI	HI	Stack overflow exception	Compile time error	C	2	0.5
14	Which two among the following are Java Exception classes? 1.SecurityException 2.DuplicatePathException 3.IllegalArgumentException 4.TooManyArgumentsException	1 and 2	1 and 3	2 and 3	3 and 4	B	2	0.5



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15	<p>Given the code fragment:</p> <pre>
 <pre> public static void main(string args){ String[][] arr={{"A","B","C"},{"D","E"}}; for(int i=0;i<=arr.length-1;i++){ for(int j=0;j<=arr[i].length-1;j++){ System.out.print(arr[i][j]+" "); if(arr[i][j].equals("B")){ break; } } continue; } } </pre>
 What is the result ?</pre>	A B C	A B C D E	A B D E	Compilation Fails	C	2	0.5
16	<p>Given below code fragment, which of the following would be the result of the execution?</p> <pre>
<pre> public class FieldInit { char c; boolean b; float f; void printAll() { System.out.println("c = " + c); System.out.println("b = " + b); System.out.println("f = " + f); } public static void main(String[] args) { FieldInit f = new FieldInit(); f.printAll(); } }</pre>
</pre>	<pre><pre> c = null b = false f = 0.0f </pre></pre>	<pre><pre> c = 0 b = false f = 0.0f </pre></pre>	<pre><pre> c = null b = true f = 0.0 </pre></pre>	<pre><pre> c = b = false f = 0.0 </pre></pre>	D	2	0.5
17	<p>Given below code fragment, which of the following would be the result of the execution?
</p> <pre><pre> String color = "Red"; switch(color){ case "Red": System.out.println("Found Red"); case "Blue": System.out.println("Found Blue"); break; case "Teal": System.out.println("Found Teal"); break; default: System.out.println("Found Default"); } }</pre></pre>	<p>Found Red Found Blue</p>	<p>Found Red</p>	<p>Found Red Found Blue Found Teal</p>	<p>Found Red Found Blue Found Teal Found Default</p>	A	2	0.5



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18	<p>Given the below mentioned lines of code
 <pre> 1 public class NcrbLabs{ 2 public static void main(String args[]){ 3 List<Integer> list= new ArrayList<>(); 4 list.add(21); list.add(13); 5 list.add(30); list.add(11); 6 list.add(2); 7 List<Integer> filteredList = list.stream().filter(// Insert code here) .collect(Collectors.toList()); 8 System.out.println(filteredList); 9 } 10 } </pre> Which of the following code inserted in line 7 to get the following output?
 21,13,11</p>	$i \rightarrow i\%2!=0$	$i \rightarrow i\%2==0$	Compilation fail	$i \rightarrow i/2==0$	A	4	1
19	<p>Given below code fragment.
 <pre> 1. public class App { 2. // Insert code here 3. System.out.print("Welcome to the world of Java"); 4. } </pre>
 Which of the following code inserted in Line 2 to enable the program to execute and print the welcome message on the screen?</p>	<pre>static void main (String [] args) {</pre>	<pre>public static void Main (String [] args) {</pre>	<pre>public static void main (String [] args) {</pre>	<pre>public void main (String [] args) {</pre>	C	2	0.5
20	Which usage represents a valid way of compiling java source file with the name "Main"?	javac Main.java	java Main.class	java Main.java	javac Main	A	2	0.5
21	You have a large flat file having product name and price. which is updated once in a day. you need to display the product name and price on your webpage catalogue. you have two point of consideration Quick Access of product list and second is consume least memory to implement it. what method you will follow to achieve this goal	you will open the file and store the product list and price in static array	you will open the file and convert into array and assign to catalogue view	you will save the file as object in NoSql database and access from there	None of the above	D	2	0.5
22	Assume that you are distributing a java based web application, which uses connection information stored in a properties file, which among the following would be your preferred choice for ensuring that the connection information remains confidential	Encrypting the data in the application configuration file	Using a code obfuscator	Using LDAP Circle of Trust based authentication for database	Querying the user for his or her credentials at run time	C	2	0.5
23	Identify the flow chart 	Binomial	Armstrong	Palindrome Number	Factorial	D	2	0.5
24	<p>Choose Correct option

 NOTE:
 1. An Armstrong number of three digits is an integer such that the sum of the cubes of its digits is equal to the number itself. For example, 371 is an Armstrong number since $3^3 + 7^3 + 1^3 = 371$.
 2. Fibonacci is a series of numbers in which each number (Fibonacci number) is the sum of the two preceding numbers. The simplest is the series 1, 1, 2, 3, 5, 8, etc
 3. A palindromic number or numeral palindrome is a number that remains the same when its digits are reversed. Like 16461</p>	FC1=Armstrong, FC2=Binary Search, FC3=Fibonacci, FC4=Palindrome	FC1=Palindrome, FC2=Binary Search, FC3=Fibonacci, FC4=Armstrong	FC1=Armstrong, FC2=Binary Search, FC3=Palindrome, FC4=Fibonacci	FC1=Fibonacci, FC2=Binary Search, FC3=Armstrong, FC4=Palindrome	A	4	1
25	<p><pre>Find the output of the following code if x=10. int sum(int x) { if (x >= 1) return x+sum(x-1); else return 0; } </pre></p>	55	56	Compiler Error	Stack over flow	A	2	0.5
26	Which among the following is a server side framework written in Java Script	Angular JS	Express JS	ReactJS	EmberJS	B	2	0.5
27	JWT or the JSON Web Tokens is a methodology to implement	Authentication	Authorization	Both Authentication and Authorization	None of the above	C	2	0.5



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28	<p>Given the following Code :</p> <pre><pre> public class Animal { private String species; private boolean canHop; private boolean canSwim; public Animal(String speciesName, boolean hopper, boolean swimmer) { species = speciesName; canHop = hopper; canSwim = swimmer; } public boolean canHop() { return canHop; } public boolean canSwim() { return canSwim; } public String toString() { return species; } } public interface CheckTrait { public boolean test(Animal a); } public class FindMatchingAnimals { private static void print(Animal animal, CheckTrait trait) { if(trait.test(animal)) System.out.println(animal); } } } public static void main(String[] args) {</pre>	"fish"	"kangaroo"	true	false	B	4	1
29	<p>Given:</p> <pre><pre> interface Gorilla { String move(); } class GorillaFamily { String walk = "walk"; void everyonePlay(boolean baby) { String approach = "amble"; //approach = "run"; play() -> walk; play() -> baby ? "hitch a ride": "run"; play() -> approach; } void play(Gorilla g) { System.out.print(g.move()+" "); } public static void main(String[] args) { GorillaFamily g = new GorillaFamily(); g.everyonePlay(Boolean.FALSE); } } </pre></pre> <p>What will be the output of the above code</p>	Compilation Error	walk hitch a ride amble	walk run amble	Runtime Error	C	4	1
30	<p>Given the following:</p> <pre><pre> 1 class Numerology{ 2 public static int num =1_245_45; 3 public static double doubleV=1_45_6.00; 4 public static void main(String[] args) 5 { 6 System.out.println(num); 7 System.out.println(doubleV); 8 } 9 } </pre></pre> <p>Choose the best option</p>	Error in Line 2	Error in lines 2 and 3	Runtime Exception	None of the above	D	4	1



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31	<p>Consider the Database Function:
<pre> Create function dept count(dept_name varchar(20)) begin declare d count integer; select count(*) into d count from instructor where instructor.dept_name= dept_name return d count; end </pre>
 i) Find the error in the above statement.
 ii) For the function created, which of the following is a proper select statement ?</p>	<pre>
i) Return type missing
ii) Select dept name, budget from instructor where dept count(dept name) > 12;</pre>	<pre>
i) Dept_name is mismatched
ii) Select dept name, budget from instructor where dept count() > 12;</pre>	<pre>
i) Reference relation is not mentioned
ii) Select dept name, budget where dept count(dept name) > 12;</pre>	<pre>
i) No Error
ii) Select dept name, budget from instructor where dept count(budget) > 12;</pre>	A	4	1
32	<p>Consider the following database for IO's to maintain a checklist against a particular FIR.
 The database maintains tasks which have been completed (checked) and which are incomplete (unchecked).
 It is having two masters and two transactional tables.
 Find <q>checkName</q>, <q>offence_id</q> and <q>firNo_id</q> of checked and unchecked <q>checkNames</q> of body offence<q>offenceType_id</q>=601 regarding fir#123/16 as shown in output table

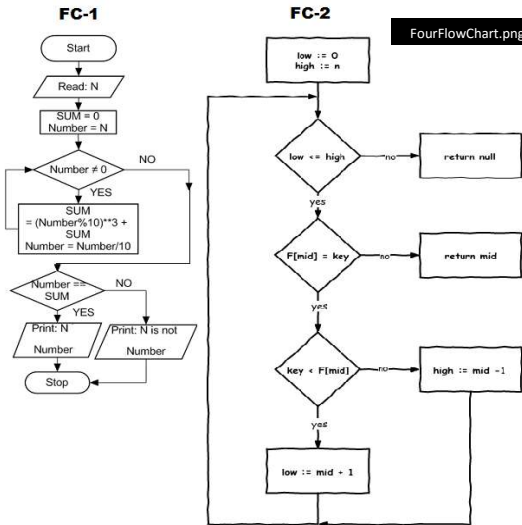
 Which of following SQL Statement produces output as shown in Desired output.</p>	<pre><pre> select a.checkName, b.offence_id, b.firNo_id from m_offence a right outer join (select * from t_checkedOffence where firNo_id= (select id from t_fir where firNo='123/16') OR firNo_id IS NULL) b on a.id=b.offence_id where offenceType_id=601 </pre></pre>	<pre><pre> select a.checkName, b.offence_id, b.firNo_id from m_offence a right outer join (select * from t_checkedOffence where firNo_id= (select id from t_fir where firNo='123/16') where firNo_id IS NULL) b on a.id=b.offence_id where offenceType_id=601 </pre></pre>	<pre><pre> select a.checkName, b.offence_id, b.firNo_id from m_offence a left outer join (select * from t_checkedOffence where firNo_id= (select id from t_fir where firNo='123/16') OR firNo_id IS NULL) b on a.id=b.offence_id where offenceType_id=601 </pre></pre>	<pre><pre> select a.checkName, b.offence_id, b.firNo_id from m_offence a left outer join (select * from t_checkedOffence where id= (select id from t_fir where firNo='123/16')) b on a.id=b.offence_id where offenceType_id=601 </pre></pre>	C	4	1
33	<p>Consider the following database for IO's to maintain a checklist against a particular FIR.
 The database maintains tasks which have been completed (checked) and which are incomplete (unchecked).
 It is having two masters and two transactional tables.

 A officer wants to check whether <q>Spot verification</q> of Fir #123/16 has been done or not. Find out which of the following SQL query correctly evaluates this.</p>	<pre><pre> select a.checkName, b.firNo from m_offence a left outer join t_checkedOffence c on a.id=c.offence_id inner join t_fir b on c.firNo_id=b.id inner join m_offencetype d on d.id=c.offence_id where a.checkName='Spot verification' and b.firNo='123/16'; </pre></pre>	<pre><pre> select a.checkName, b.firNo from m_offence a left outer join t_fir b on a.id=b.offenceType_id join t_checkedOffence c on c.firNo_id=b.id where a.checkName='Spot verification' and b.firNo='123/16'; </pre></pre>	<pre><pre>select a.checkName, b.firNo from m_offence a,t_fir b,t_checkedOffence c where a.checkName='Spot verification' and a.id=c.offence_id and c.firNo_id=b.id and b.firNo='123/16'; </pre></pre>	None of the above	C	4	1
34	<p>Consider the following database for IO's to maintain a checklist against a particular FIR.
 The database maintains tasks which have been completed (checked) and which are incomplete (unchecked).
 It is having two masters and two transactional tables.

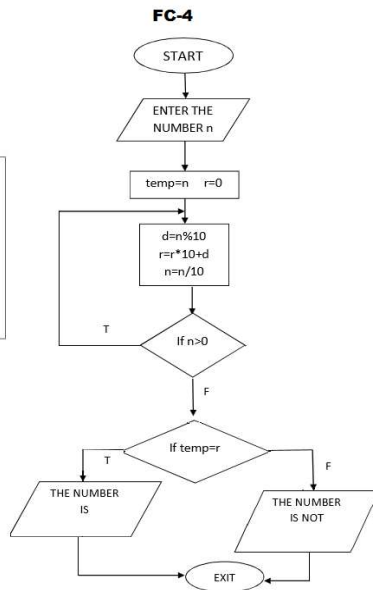
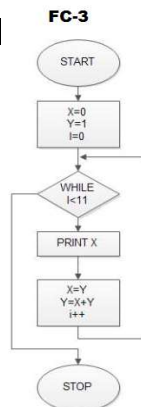
 <p>Find no. of checks that have been done in each fir with offence type is <q>Body Offence</q> in ascending order by <q>firNo</q>. Which of the following query will produce the desired result. </p></p>	<pre><pre>select count(a.offence_id), b.firNo from t_checkedOffence a,t_fir b,m_offencetype c where a.firNo_id=b.id and c.id=b.offenceType_id group by b.firNo having c.id='Body Offence' order by b.firNo asc</pre></pre>	<pre><pre>select count(a.offence_id), b.firNo from t_checkedOffence a right outer join t_fir b on a.firNo_id=b.id right outer join m_offencetype c on c.id=b.offenceType_id group by b.firNo having c.id='Body Offence' order by b.firNo asc </pre></pre>	<pre><pre>select count(a.offence_id), b.firNo from t_checkedOffence a,t_fir b,m_offencetype c where a.firNo_id=b.id and c.id=b.offenceType_id and c.name='Body Offence' group by b.firNo,a.offence_id order by b.firNo asc</pre></pre>	<pre><pre> select count(a.offence_id), b.firNo from t_checkedOffence a,t_fir b,m_offencetype c where a.firNo_id=b.id and c.id=b.offenceType_id and c.name='Body Offence' group by b.firNo order by b.firNo</pre></pre>	D	4	1
35	<p>What is the priority of the thread in output of this program?
<pre> class multithreaded_programing { public static void main(String args[]) { Thread t = Thread.currentThread(); System.out.println(t); } }</p>	4	5	1	0	B	2	0.5



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36	<pre> class X implements Runnable { public static void main (String args[]) { /* Missing Code */ } public void run () { } } </pre> Identify the missing code. Choose correct option 	<pre> Thread t = new Thread(X);t.start(); </pre>	<pre> X run = new X();Thread t= new Thread(run);t.start(); </pre>	<pre> Thread t = new Thread(); x.run();t.start(); </pre>	<pre> Thread t= new Thread(X);t.start(); </pre>	B	2	0.5
37	<pre> import java.net.*; class networking { public static void main(String[] args) throws UnknownHostException { InetAddress obj1 = InetAddress.getByName("cisco.com"); System.out.print(obj1.getHostName()); } } </pre> UnknownHostException { InetAddress obj1 = InetAddress.getByName("cisco.com"); System.out.print(obj1.getHostName());	127.0.0.0/cisco.com	cisco.com	www.cisco.com	http://www.cisco.com	B	2	0.5
38	What notifyAll() method do?	Wakes up all threads that are waiting on this object's monitor	Wakes up all threads that are not waiting on this object's monitor	Wakes up all threads that are in runnable state on this object's monitor	Wakes up main threads that are not runnable on this object's monitor	A	2	0.5
39	Which collection class grows or shrinks its size and provides indexed access to its elements, but methods are not synchronized?	java.util.ArrayList	java.util.List	java.util.HashSet	java.util.Vector	A	2	0.5
40	What is the output for the below code ? <pre> 1. public class Test { 2. public static void main(String[] args){ 3. byte i = 128; 4. System.out.println(i); 5. } 6. } </pre>	0	128	Compilation fails with an error at line 4	Compilation fails with an error at line 3	D	2	0.5



FourFlowChart.png



m_offence		
id (PK)	checkName	offenceType_id
501	FIR	601
502	Spot verification	601
503	Medical examination of the injured and MLC	601
504	Statement of neighbours	602
505	Production of accused before court	601

m_offenceType	
id(PK)	Name
601	Body Offence
602	Property Offence

t_fir			
id(PK)	firNo	offenceType_id	firSummary
101	123/16	601	summary1
102	120/16	601	summary2

t_checkedOffence		
id(PK)	firNo_id	offence_id
201	101	502
202	101	505

Desired Output		
checkname	firNo_id	offence_id
FIR	NULL	NULL
Spot verification	101	502
Medical examination of the injured and MLC	NULL	NULL
Production of accused before court	101	505

database.jpg



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m_offence			m_offenceType	
id (PK)	checkName	offenceType_id	id(PK)	Name
501	FIR	601	601	Body Offence
502	Spot verification	601	602	Property Offence
503	Medical examination of the injured and MLC	601		
504	Statement of neighbours	602		
505	Production of accused before court	601		

database1.png

t_fir				t_checkedOffence			
id(PK)	firNo	offenceType_id	firSummary	id(PK)	firNo	id	offence_id
101	123/16	601	summary1	201	101	502	
102	120/16	601	summary2	202	101	505	

