

Q. Consider the below pseudocode:

```
BEGIN
  content[30]= "Pseudocode"
  FOR i=0 to content[i] not equal to end of character
    If (content[i]>=97 AND content[i]<=122) Then
      content[i]=content[i]-32;
    END IF
  END FOR
END
```

Which of the good programming practices have been followed in the above code?

- 1). **Layout**
- 2). Naming Conventions
- 3). Modularity
- 4). Maintainability

Q. Consider the below form to Book a Rail Ticket.

The user can book only ten tickets with a transaction. Choose the valid equivalence partitioning for Number of Tickets field in the given scenario.

- 1). 100 tickets is Valid.
- 2). **0 and less than zero is Invalid.**
- 3). **10 is Valid.**
- 4). **11 is Invalid.**

Q. Select the valid statements w.r.t software testing:

- 1). Software testing is in a way a destructive process
- 2). Software testing is a process used to help identify the correctness, completeness and quality of a developed computer software
- 3). Software testing is Verifying and Validating if the Software is working as it is intended to be working
- 4). **Software testing is the process of executing a program with the intent of finding the errors**

Q. Consider the below statements:

- A) Password should be of length 10 digits
- B) Password can be alpha-numeric

Which of the defensive programming technique would be used to implement the above requirement while writing the program?

- 1). Error Handling
- 2). Output Validation
- 3). **Input Validation**
- 4). None of the above

Q. Which of the following are advantages of modular programming?

- 1). **Modification in any module will not affect our main module.**
- 2). **The changes made in an appropriate function will affect only that module other modules will remain unaffected.**
- 3). The main module becomes independent of the sub modules and coupling is zeroed.
- 4). The modules introduce defensive programming technique by minimizing testing effort.

Q. You have an application which enables a user to enter a URL.

The URL may contain spaces, which are not supported in requests which are sent from browsers. You need to solve this problem by replacing the space by a special symbol like %.

How can this be achieved?

- 1). Use decode method.
- 2). Use append method.
- 3). **Use escape method.**

Q. Which of the following selector will apply the style on the element designated by a pointing device?

- 1). .hover
- 2). **:hover**
- 3). :onfocus
- 4). .onfocus

Q. Which of the event handlers are supported in button objects?

- 1). **OnClick**
- 2). OnChange
- 3). **OnMouseUp**
- 4). **OnMouseDown**

Q. Consider the below code snippet:

Select a country:

```
<select name="country">
  <option value="Germany">Germany</option>
  <option value="India" selected>India</option>
  <option value="China">China</option>
  <option value="Japan" >Japan</option>
</select>
```

Which of the statement(s) is/are true about the above given code snippet?

- 1). User will be able to select more than one country from this list
- 2). **Default selected country is "India"**
- 3). **Name of this drop down list box is "country"**
- 4). By default, all the options are visible in the drop down list box.

Q. Rakshana likes to create an input field only to display contents and contents length may exceed more than one line. Which statement is more suitable for this requirement?

- 1). <input type="text" value="Content" readonly/>
- 2). **<textarea readonly>Content</textarea>**

- 3). <textarea>Content</textarea>
4). <textarea value="Content" disabled/>
Q. Consider HTML code snippet:

```
<input type="checkbox" value="Web Basics" name="skill"/>WebBasics  
<input type="checkbox" value="Oracle" name="skill"/>Oracle<BR>  
<input type="checkbox" value="Core Java" name="skill"/>Core Java  
<<input type="checkbox" value="Spring" name="skill"/>Spring
```

Consider JavaScript Code snippet:

```
1:function validate() {  
2: var len1=document.frm.skill.length;  
3: var skillsList="";  
4: var count=0;  
5: for(index1=0;index1<len1;index1++) {  
6: if(_____) {  
7:  count++;  
8:  skillsList=skillsList+" , "+document.frm.skill[index1].value; }  
9: }  
10: if(count==0) {  
11:  alert("Select any one of the skills");  
12:  return false;  
13: } else {  
14:  alert("Selected skills"+skillsList+"\nSelected city "+document.frm.city.value);  
15:  return true; }  
16: }
```

Which statement has to be included in the blank line at Line 6 to check whether any check box is checked or not?

- 1). document.frm.skill[index1].selected
2). **document.frm.skill[index1].checked**
3). document.frm.skill[index1].disabled
4). document.frm.skill[index1].unchecked

Q. Which of the following statements are false with respect to XML?

- i) XML document can contain more than one root element.
ii) XML tags are case sensitive.
iii) XML document can contain empty elements.

- 1). **only i**
2). i & ii
3). iii & iv
4). ii & iii

Q. <!DOCTYPE HTML>

```
<html>  
<body>  
<form action="">  
Enter a date before 1980-01-01:  
<input type="date" name="bday" max="1979-12-31">  
<br>
```

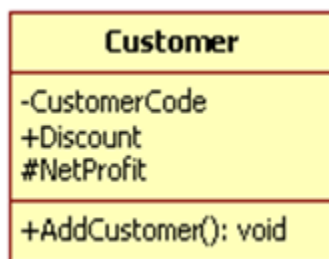
Enter a date after 2000-01-01:

```
<input type="date" name="bday" min="2000-01-01">
<br>
<input type="submit">
</form>
</body>
```

Given the above code snippet in HTML5, what date the date picker will display ?
</html>

- 1). Wrong attributes used, instead use "minimum" and "maximum" with input type date to apply constraints
- 2). The first date is displayed from December, 1979 and after that and will span to year 1980 or afterwards. The second date is displayed before year 2000
- 3). **The first date is displayed from December, 1979 and before that and will not span to year 1980 or afterwards. The second date is displayed after year 2000 and not before**
- 4). Min and Max attributes have no effect on input type as date and date picker shows current date

Q. What will be true as per below diagram?



- 1). NetProfit attribute is accessible in all classes.
- 2). Discount attribute is accessible only within the component.
- 3). **NetProfit attribute is accessible only within the component.**
- 4). **CustomerCode attribute is not accessible in other class.**

Q. Consider an online shopping site named "shoppee.com". Customers are supposed to fill a form for ordering the items. What relationship exists between form and fields available in the form?

- 1). Is - A relationship
- 2). **Has - A relationship**
- 3). Realization
- 4). Generalization

Q. When two or more classes serve as base class for a derived class the situation is known as _____.

- 1). **Multiple inheritance**
- 2). Polymorphism
- 3). Encapsulation
- 4). Hierarchical inheritance

Q. Match the following notations with relevant diagrams:

- | | |
|-----------------|---------------------|
| 1. Swim lanes | a. Sequence Diagram |
| 2. Lifeline | b. Usecase Diagram |
| 3. Stick figure | c. Object Diagram |
| 4. Links | d. Activity Diagram |

1). 1. d

2. c

3. b

4. a

2). 1. b

2. c

3.d

4. a

3). **1. d**

2. a

3. b

4. c

4). 1. b

2. d

3. c

4. a

Q. Which of the following is not a true UML diagram?

1). Activity Diagram

2). Object Diagram

3). Deployment Diagram

4). **Data Flow Diagram**

5). Class Diagram

Q. Identify the true or false statements:-

Statement 1:DeleteView command removes one or more views from current database.

Statement 2:A table with a ColumnStore Index cannot be updated.

1). Statement 1 is true and Statement 2 is false

2). Both are false

3). Both are true

4). **Statement 1 is false and
Statement 2 is true**

Q.Manoj need to optimize the queries for his InsertCustomer Stored Procedure. What he should specify while creating the Stored Procedure?

1). **RECOMPILE**

2). SCHEMABINDING

3). ENCRYPTION

4). NO RECOMPILE

Q. Which of the following ensures to allow corresponding rows to get updated or deleted in the referencing table, whenever an updation or deletion happens in the parent table.

- 1). **CASCADE**
- 2). SET NULL
- 3). SET DEFAULT
- 4). NO ACTION

Q. Assume Employee table with N number of records in it. In each department there may be M number of Employees. Instead of retrieving the entire Employee Records based on the department, which of the new features of SQL Server allow us to extract a portion of rows from the result set?

- 1). OrderBy
- 2). **Fetch**
- 3). **Offset**
- 4). GroupBy

Q. The _____ option obfuscates the definition of the procedure when querying the system catalog or using metadata functions

- 1). **WITH ENCRYPTION**
- 2). RECOMPILE
- 3). SCHEMA BINDING
- 4). NO RECOMPILE

Q. Which of the following column type will allow the rows data of different types?

- 1). ntext
- 2). date
- 3). smallmoney
- 4). **sql variant**

Q. Madhura would like to retrieve name of the cities with temperature and condition whose condition is neither rainy or windy.

1). **SELECT city, temprature, condition
FROM Forecast
WHERE condition NOT IN ('rainy', 'windy')**

2). SELECT city, temprature, condition
FROM Forecast
WHERE condition NOT BETWEEN ('rainy', 'windy')

3). SELECT city, temprature, condition
FROM Forecast
WHERE condition IN ('rainy', 'windy')

4). SELECT city, temprature, condition
FROM Forecast
WHERE condition BETWEEN ('rainy', 'windy')

Q. State whether True or False:

1. Return Statement unconditionally terminates a query or a stored procedure or a batch.
 2. Throw statement contains a severity parameter to specify the Severity level of the exception thrown
- 1). Both are true

2). Both are false

3). **Statement 1 is true and 2 is false**

4). Statement 1 is false and 2 is true

Q. State whether True or False:

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Q. What would be the result of the following statement in T-SQL ?

UPDATE dbo.EmployeePayDetails

SET Salary = Salary + 0.05*Salary;

1). **The statement increases the Salary of all Employees by 5 percent**

2). The statement increases the Salary of all Employees by 50 percent

3). The statement increases the Salary of first record in EmployeePayDetails by 5 percent

4). The statement increases the Salary of last record in EmployeePayDetails by 5 percent

Q. Arun creates a UserRegistration table which consists of UserName, City, Age, Qualification, etc. He wants to insert the records only if the user's age is between 18 & 60. Which of the following constraints need to be used?

1). Primary Key Constraint

2). **Check Constraint**

3). Foreign Key Constraint

4). Unique Key Constraint

Q. Identify the correct query to produce a list of all the territories and the sales people working in the m.

1). SELECT st.Name AS TerritoryName, sp.BusinessEntityID, sp.SalesQuota, sp.SalesYTD
FROM Sales.SalesPerson AS sp RIGHT JOIN Sales.SalesTerritory AS st
ON sp.TerritoryID = st.TerritoryID
ORDER BY st.Name, sp.BusinessEntityID

2). SELECT st.Name AS TerritoryName, sp.BusinessEntityID, sp.SalesQuota, sp.SalesYTD
FROM Sales.SalesPerson AS sp LEFT JOIN Sales.SalesTerritory AS st
ON sp.TerritoryID = st.TerritoryID
ORDER BY st.Name, sp.BusinessEntityID

3). SELECT st.Name AS TerritoryName, sp.BusinessEntityID, sp.SalesQuota, sp.SalesYTD
FROM Sales.SalesPerson AS sp FULL OUTER JOIN Sales.SalesTerritory AS st
ON sp.TerritoryID = st.TerritoryID
ORDER BY st.Name, sp.BusinessEntityID

4). **SELECT st.Name AS TerritoryName, sp.BusinessEntityID, sp.SalesQuota, sp.SalesYTD
FROM Sales.SalesPerson AS sp JOIN Sales.SalesTerritory AS st
ON sp.TerritoryID = st.TerritoryID
ORDER BY st.Name, sp.BusinessEntityID**

Q.Sonali wants to include all rows from both emp and dept tables, regardless of whether or not the other table has a matching value. Which Join you would recommend her?

1). **SELECT Empid, Empname, DeptID, DeptName
FROM Emp FULL OUTER JOIN Dept
ON Dept.DeptID= Emp.DeptID**

2). SELECT Empid, Empname, DeptID, DeptName
FROM Emp RIGHT OUTER JOIN Dept
ON Dept.DeptID= Emp.DeptID

3). SELECT Empid, Empname, DeptID, DeptName
FROM Emp LEFT OUTER JOIN Dept
ON Dept.DeptID= Emp.DeptID

4). SELECT Empid, Empname, DeptID, DeptName
FROM Emp CROSS OUTER JOIN Dept
ON Dept.DeptID= Emp.DeptID

Q. Choose the correct query to find out all customers who haven't placed any order.

1). **SELECT CustomerID FROM Customers
EXCEPT
SELECT CustomerID FROM Orders**

2). SELECT CustomerID FROM Customers
INTERSECT
SELECT CustomerID FROM Orders

3). SELECT CustomerID FROM Customers
UNION
SELECT CustomerID FROM Orders

4). SELECT CustomerID FROM Customers
UNION ALL
SELECT CustomerID FROM Orders

Q.For his Online Banking WebSite Rahul wish to display just a small selection of customer details region wise. Which SQL command you would suggest Rahul?

1). **Fetch and OffSet**

2). GroupBy

3). Grouping Sets

4). Order By

Q. What will be the output of the select command ?

SELECT ABS(0.0)

1). 0.00

2). .0

3). 0.0

4). -0

Q.To lists the employee details of all employees who belong to the same region as employee 12345 ?

1). **SELECT EmployeeID, EmployeeName
FROM Employees
WHERE Region =
(SELECT Region FROM Employees
WHERE EmployeeID=12345)**

2). SELECT EmployeeID, EmployeeName
FROM Employees
WHERE Region IN
(SELECT Region FROM Employees
WHERE EmployeeID=12345)

3). SELECT EmployeeID, EmployeeName
FROM Employees
WHERE Region NOT IN
(SELECT Region FROM Employees
WHERE EmployeeID=12345)

4). SELECT EmployeeID, EmployeeName
FROM Employees
WHERE Region !=
(SELECT Region FROM Employees
WHERE EmployeeID=12345)

Q.Mahesh needs to store many email addresses in his employee database, in various tables. Which data type you would recommend Mahesh?

1). **XML**

2). Alias

3). Hierarchyid

4). Varchar

Q. Mehul needs to display the start day and start month from Production.Orders table.

1). SELECT StartDate, DATEPART(month, StartDate) AS StartMonth
FROM Production.WorkOrder
WHERE WorkOrderID = 1

2). **SELECT StartDate, DATENAME(month, StartDate) AS StartMonth
FROM Production.WorkOrder
WHERE WorkOrderID = 1**

3). **SELECT StartDate, GetDate(month, StartDate) AS StartMonth
FROM Production.WorkOrder
WHERE WorkOrderID = 1**

4). SELECT StartDate, DATEADD(month, StartDate) AS StartMonth
FROM Production.WorkOrder
WHERE WorkOrderID = 1

Q. State True or False:

1. Primary Key Constraint enforces referential integrity.

2. Alias data type can be used when several tables must store the same type of data in a column with identical data type, length and nullability.

1). Statement 1 is true and Statement 2 is false

2). Both are false

3). Both are true

4). **Statement 1 is false and Statement 2 is true**

Q. What will be the output of this query?

```
SELECT pname
```

```
FROM Products
```

```
WHERE categoryId IN (SELECT CategoryId
```

```
FROM Category
```

```
WHERE categoryName IN('Electronics', 'Computers'))
```

1). It will display the name of all Products under Electronics

2). It will display the name of all Products not under Electronics and Computers

3). Error in the syntax of query

4). **It will display the name of all Products under Electronics or Computers**

Q. Assume a Course table with columns CourseId, Title, Duration. Choose appropriate query to list out all titles which contains the word "Database".

1). **SELECT ***

FROM Course

WHERE title LIKE '%Database%'

2). SELECT *

FROM Course

WHERE title LIKE 'Database'

3). SELECT *

FROM Course

WHERE title ='Database%'

4). SELECT *

FROM Course

WHERE title LIKE '%Database'

Q. This CLR data type is used in street maps for finding the distance between two locations.

1). Geography

2). **Geometry**

3). Hierarchy

4). Alias

Q. Which of the following objects can you use in a check constraint?

1). **User Defined Functions**

2). Stored Procedure

3). View

4). **Indexes**

Q. Identify the Domain Constraint type.

- 1). **CHECK**
- 2). UNIQUE
- 3). DEFAULT
- 4). FOREIGN KEY

Q. What would the following subquery imply?

```
SELECT Min(salary)
```

```
FROM employees
```

```
WHERE salary NOT IN (SELECT Min(salary) FROM employees)
```

- 1). This would return the highest salary of employee
- 2). **This would return the second lowest salary of employee**
- 3). This would return second highest salary of employee
- 4). This would return the second lowest salary of employee if NOT is excluded from the query

Q. _____ spatial data type supports planar, or Euclidean (flat-earth).

- 1). **Geometry**
- 2). Geography
- 3). Hierarchyid
- 4). Xml

Q. Mona want to retrieve the name of the product for those products that have a 3 in the first digit of their list price. She also want to ensure that the ListPrice should be converted to int. Refer the below query execution and predict the query for the same.

1). **SELECT SUBSTRING(Name, 1, 30) AS ProductName, ListPrice
FROM Production.Product
WHERE CAST(ListPrice AS int) LIKE '3%';**

2). SELECT LTRIM(Name, 1, 30) AS ProductName, ListPrice
FROM Production.Product
WHERE CAST(ListPrice AS int) LIKE '3%';

3). SELECT RTRIM(Name, 1, 30) AS ProductName, ListPrice
FROM Production.Product
WHERE CAST(ListPrice AS int) LIKE '3%';

4). SELECT SUBSTRING(Name, 1, 30) AS ProductName, ListPrice
FROM Production.Product
WHERE CAST(ListPrice AS int) NOT LIKE '3%';

Q. Which of the option is valid with respect to the following statement?

```
SELECT productName, price
```

```
FROM Product
```

```
WHERE price > ALL (25, 50);
```

- 1). **The query would return all products whose price is greater than 50**
- 2). The query would return all products whose price is greater than 25
- 3). The query would return all products whose price is between 25 and 50
- 4). The query would return all products whose price is less than 2

Q. Which of the following in SQL Server makes the execution to jump from a TRY block to the associated CATCH?

- 1). @@ERROR
- 2). RAISE ExceptionName
- 3). **RAISERROR**
- 4). None of the above

Q. _____ stores values of various SQL Server-supported data types.

- 1). **Sql variant**
- 2). table
- 3). XML
- 4). Max

Q. To list all those products whose price is above all the price of products supplied by supplier 10098

- 1). SELECT ProductID, ProductName, SupplierID
FROM Products
WHERE UnitPrice > ANY (Select UnitPrice FROM Products WHERE SupplierID=10098)
- 2). SELECT ProductID, ProductName, SupplierID
FROM Products
WHERE UnitPrice > SOME (Select UnitPrice FROM Products WHERE SupplierID=10098)
- 3). **SELECT ProductID, ProductName, SupplierID
FROM Products
WHERE UnitPrice > ALL (Select UnitPrice FROM Products WHERE SupplierID=10098)**
- 4). SELECT ProductID, ProductName, SupplierID
FROM Products
WHERE EXISTS (Select UnitPrice FROM Products WHERE SupplierID=10098)

Q. Which of the following are not types of Views in SQL Server?

- 1). Standard Views
- 2). Partitioned View
- 3). **Non-IndexedView**
- 4). **Special Views**

Q. You need to define multiple groupings in the same query. Which SQL Server feature you will use?

- 1). GroupBy
- 2). Order By
- 3). **Grouping Sets**
- 4). Top command

Q. Identify the join used in the below given query.

SELECT e.employeeid, e.employeename, d.deptname
FROM Employee e , Department d

- 1). Equi-join
- 2). Inner Join
- 3). Natural Join
- 4). **Cartesian Join**

