1. Write a query to find salesperson fullname, emailaddress, phone who received 2,000.0 in bonus. Use humanresources.employee, person.contact, sales.salesperson tables from adventureworks database.(2 Marks)
2. Shared locks are compatible with other Shared locks or Update locks

**True or false** (1 Marks)

1. Using the below 2 tables and write a query to find the list of employees (employee number and names) having more salary than the average salary of all employees in that employee's department.(3 Marks)

|  |  |  |
| --- | --- | --- |
| ***Employee\_no*** | ***Salary*** | ***Department*** |
| 1 | 5678 | 10 |
| 2 | 9807 | 20 |
| 3 | 6500 | 10 |
| 4 | 6565 | 10 |
| 5 | 9000 | 20 |
| 6 | 1000 | 10 |
| 7 | 8000 | 20 |
| 8 | 5000 | 20 |
| 9 | 3890 | 10 |
| 10 | 8000 | 20 |

|  |  |
| --- | --- |
| ***Department\_id*** | ***Department\_name*** |
| 10 | Marketing |
| 20 | finance |

1. Tables has been created by using below scripts, write a query which would display the personname, petname and the pettype, if any(3 Marks)

Create table People

(

PersonID int identity primary key,

PersonName varchar (20)

)

Create table PetTypes

(

PetTypeID int identity primary key,

PetType varchar (10)

)

Create table Pets

(

PetID int identity primary key,

PetTypeID int references PetTypes (PetTypeID) not null,

PetName varchar (10),

OwnerID int references People (PersonID) not null

)

1. What are included columns in index? (2 Marks)
2. Using the Production.Product, Purchasing.ProductVendor and Purchasing.Vendor tables in Adventureworks database write a query which would display the ProductName along with their VendorName.(3 Marks)
3. Using HumanResources.Employee, HumanResources.EmployeeDepartmentHistory and HumanResources.Department from the adventureworks database. write a query to return the EmployeeId, Designation, DepartmentName, GroupName and Startdate (5 Marks)
4. Create the below table : company

Company\_ID CompanyName Address Town Sales

1 SQL Sample 1 Sample St Hamburg 10000

2 SQL Code Land 2 Code Rd Hamburg 20000

3 Sample Code World 66 SQL St Curry 18000

4 SQL Reference Ltd 34 Reference St Pisa 17000

Write a query to calculate the average sales for each Town (5 Marks)

1. Using the MIN, MAX, AVG functions with the OVER clause, write a query to provide aggregated values for each department in the HumanResources.Department table. Refer HumanResources.EmployeePayHistory , HumanResources.EmployeeDepartmentHistory and HumanResources.Department in adventureworks database.(5 Marks)
2. Write a query to return the standard deviation for all bonus values in the SalesPerson table(1 Marks)
3. Write a query on table users with rowlock option for updating username as fred where username is ‘foobar’ (2 Marks)
4. Create partition view across the three server tables, partitiontable1 in server1, partitiontable2 in server2 and partitiontable3 in server3 (2 Marks)
5. Create a partition function with range specified, first 10 records are stored in one filegroup and rest are stored in different filegroup(2 Marks)
6. What is an intent lock (3Marks)
7. What is the difference between truncate and delete (4Marks)
8. Given below is the ‘staff\_details’ table, with data on the staff working in a supermarket.(5Marks)

|  |  |  |
| --- | --- | --- |
| **Staff\_id** | **Name** | **Salary** |
| 1 | Ken | 6500 |
| 2 | Mike | 5600 |
| 3 | Jamie | 3490 |
| 4 | Catherine | 4800 |
| 5 | Rick | 7000 |
| 6 | Paula | 2000 |
| 7 | Jane | 5000 |

You are the manager of this supermarket and you need to find:

1. The top two staff who earn the most
2. the staff with 6th highest salary

Use the query below to create the staff\_details table

Create table staff\_details (staff\_id int, name varchar (20), Salary int)

Go

Insert into staff\_details (staff\_id, name, salary)

**Select** 1,'ken', 6500

Union

Select 2,'mike', 5600

Union

Select 3,'jamie', 3490

Union

Select 4,'catherine', 4800

Union

Select 5,'Rick', 7000

Union

Select 6,'paula', 2000

Union

Select 7,'Jane', 5000

go

1. You are working as a DBA. You have been assigned a task to keep track of all DML actions performed on the employee\_test table. Therefore, you create an audit table to track the DML actions on employee\_test table; along with the time when DML was performed on the employee\_test table. (4marks)

Create employee\_test table and employee\_test\_audit table using the below query:

CREATE TABLE Employee\_Test

(

Emp\_ID INT Identity,

Emp\_name Varchar (100),

Emp\_Sal Decimal (10, 2)

)

CREATE TABLE Employee\_Test\_Audit

(

Emp\_ID int,

Emp\_name varchar (100),

Emp\_Sal decimal (10, 2),

Audit\_Action varchar (100),

Audit\_Timestamp datetime

)

1. What is the output when the below SP is executed? (2Marks)

Create Proc usp\_A

As

Begin

Begin Tran

Insert into table A

--insert a record

Begin Tran

Insert into table A

--insert a record

Commit Tran

Rollback Tran

End

1. What are the two modes of DMLTriggers in SQL Server? (2Marks)
2. Use WHILE loop to generate the following output (3Marks)

1 X 2 = 2

2 X 2 = 4

3 X 2 = 6

4 X 2 = 8

5 X 2 = 10

6 X 2 = 12

7 X 2 = 14

8 X 2 = 16

9 X 2 = 18

10 X 2 = 20

1. What are drawbacks of cursor? Why we should not use them? (3Marks)
2. Write a program that prints the numbers from 1 to 100. But for multiples of three print “Fizz” instead of the number and for the multiples of five print “Buzz”. For numbers which are multiples of both three and five print “FizzBuzz”.
3. Create following four tables with the data as below:

Table A   
ID Name     
1   John      
2   Paul      
   
Table B   
ID Name

1   Ringo   
2   George   
   
Table C   
ID Name     
1   Bob      
   
Table D   
ID Name     
1   Kate

Create a single view to display all the columns from Table A and Table D and only id column from Table B and name column from Table B. (4Marks)

1. creates the database Sales that has the following file groups:

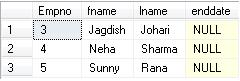
The primary file group with the files Spri1\_dat and Spri2\_dat. The FILEGROWTH increments for these files are specified as 15%.

A file group named SalesGroup1 with the files SGrp1Fi1 and SGrp1Fi2.

A file group named SalesGroup2 with the files SGrp2Fi1 and SGrp2Fi2 (5Marks)

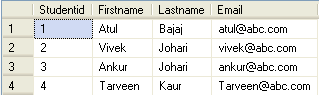
1. Write a query to find database file location (2Marks)
2. Build a query to get list of xml collection name with respective schema name and also Build a query to reconstruct a xml collection by using xml\_schema\_namespace (5marks)
3. Suppose we have two tables in which Import\_Employee is a source table and Employee is a target table.

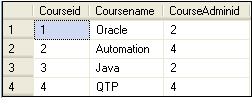
[](http://2.bp.blogspot.com/-IcfxQsRTMU0/T4ulNj55WaI/AAAAAAAAA6k/vbhS27-4CVw/s1600/Merged_1.jpg)----------------------🡪 Import\_Employee (source table)

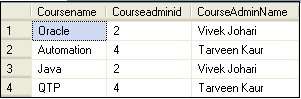
[](http://4.bp.blogspot.com/-Lrdfxx_e8Po/T4ulWku1reI/AAAAAAAAA6s/tgMUdEU0bS8/s1600/Merged_2.jpg)----------------🡪 Employee (target table)

Suppose we have the following requirements:-  
1) If a empno is exists in both the table then the corresponding values of the column Fname and Lname for the empno in the table Employee is updated by the corresponding values of the column  firstname and  lastname of the Empno from the source table Import\_Employee  .  
2) If there is no corresponding empno in the Target table Employee for a empno of the table Import\_Employee, then the data from the Source table is inserted into the target table for that empno.  
3) If there exists a records for a empno in the Target table whose corresponding records are not in the Source table, these these record should be deleted from the target table.(7 Marks)

1. we want to get the details of the Courses including the name of their course admin from the Course table (5Marks)

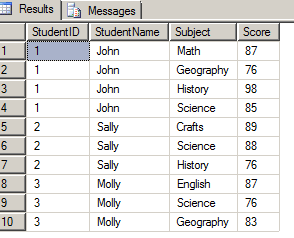
[](http://4.bp.blogspot.com/_8iWtCcGgcH8/SsI2s5I4_PI/AAAAAAAAAYw/BoZVJXgSlOk/s1600-h/Studenttable.PNG)----------🡪student table

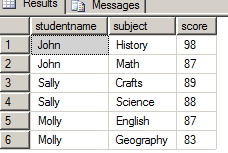
[](http://2.bp.blogspot.com/_8iWtCcGgcH8/SsI3jMZNAsI/AAAAAAAAAY4/eds8tiS3qXQ/s1600-h/CourseTable.PNG)--------------------🡪course table

[](http://3.bp.blogspot.com/_8iWtCcGgcH8/SsI6yM2mTzI/AAAAAAAAAZQ/JL9C1oXewdY/s1600-h/CorrelatedSubquery_1.PNG)-----------🡪expected output

1. Build a query for the below grades table to display highest top two scores of each student. (3Marks)

Hint: use row number with over by clause

-----------------🡪grades table

-----------------------------🡪excepted result set

1. Create a stored procedure to delete records from Both Student details and Library. Database will only commit, if both delete statement execute successfully, If fails it will Rollback. Intentionally I have passed a wrong roll ( Which causes) the exception and transaction will rollback (5Marks)
2. Write a Query to retrieve the top two employees who earn the most from employee table in SQL Server by using a CTE (2Marks)
3. Create a table table1 in database1.Create another table table2 in database2. Insert values in both the tables, **few rows with same data**.Write a query which would return the rows with similar data from both the tables table1 andtable2 in database1 and database2 databases

(HINT: use intersect) (2Marks)