**Part 01**

**Use ITI DB**

1. Write a query to select the highest two salaries in Each Department for instructors who have salaries. “Using one of Ranking Functions”
2. Write a query to select a random student from each department. “Using one of Ranking Functions”

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**Part 02**

**Restore adventureworks2012 Database Then:**

1. Display the SalesOrderID, ShipDate of the SalesOrderHearder table (Sales schema) to designate SalesOrders that occurred within the period ‘7/28/2002’ and ‘7/29/2014’
2. Display only Products(Production schema) with a StandardCost below $110.00 (show ProductID, Name only)
3. Display ProductID, Name if its weight is unknown
4. Display all Products with a Silver, Black, or Red Color
5. Display any Product with a Name starting with the letter B
6. Run the following Query

UPDATE Production.ProductDescription

SET Description = 'Chromoly steel\_High of defects'

WHERE ProductDescriptionID = 3

Then write a query that displays any Product description with underscore value in its description.

1. Display the Employees HireDate (note no repeated values are allowed)
2. Display the Product Name and its ListPrice within the values of 100 and 120 the list should have the following format "The [product name] is only! [List price]" (the list will be sorted according to its ListPrice value)

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**Part 03(Functions)**

**Use ITI DB:**

1. Create a scalar function that takes a date and returns the Month name of that date.
2. Create a multi-statements table-valued function that takes 2 integers and returns the values between them.
3. Create a table-valued function that takes Student No and returns Department Name with Student full name.
4. Create a scalar function that takes Student ID and returns a message to user.
   1. If first name and Last name are null, then display 'First name & last name are null.'
   2. If First name is null, then display 'first name is null'
   3. If Last name is null, then display 'last name is null.'
   4. Else display 'First name & last name are not null'
5. Create a function that takes an integer which represents the format of the Manager hiring date and displays department name, Manager Name and hiring date with this format.
6. Create multi-statement table-valued function that takes a string.
   1. If string='first name' returns student first name
   2. If string='last name' returns student last name
   3. If string='full name' returns Full Name from student table

Note: Use “ISNULL” function

1. Create function that takes project number and display all employees in this project (Use MyCompany DB)