**BDTM: Big Data Tools for Managers**

**2nd Internal Question Paper**

**Version-B**

Q1. Create below table with data and demonstrate JOIN operation in SQL.

Table1 : customers

|  |  |
| --- | --- |
| **customer\_id** | **name** |
| 1001 | Nick |
| 1002 | Bob |

Table 2: customers\_orders

|  |  |  |  |
| --- | --- | --- | --- |
| **ID** | **customer\_id** | **item** | **qty** |
| 1 | 1001 | Item-1 | 10 |
| 2 | 1001 | item-2 | 20 |
| 3 | 1001 | item-3 | 30 |
| 4 | 1001 | item-4 | 40 |

Write MySQL Queries for following:

1. Create customers & customers tables with data. [10]
2. Perform INNER Join with two tables. [5]

Q2. Write simple IF conditional statement to variable contains positive value. [5]

For Example Variable: var1 = 99

Q3. Demonstrate List Data structures in Python

1. Create List with elements 0,1,2,3,4,5,6,7,8,9,10 [4]
2. Display all the list elements [2]
3. Display the number of elements present in List using len() function [1]
4. Add 20, 30 elements in to the existing list. [3]

Q4. Demonstrate Tuple Data structures in Python

1. Create a Tuple with elements [1]

10, 20, 30, 40, 50, 60, 70, 80, 90, 100

1. Display First element of Tuple [1]
2. Display last element of Tuple [1]
3. Display first 3 elements of tuple [1]
4. Display last 3 elements of tuple [1]

Q5. Demonstrate Pandas package to perform data analysis for IPL dataset.

Step 1: Write below code to read data from Internet and IPL dataset will be loaded into data variable, use data variable name to perform below operations.

**import pandas as pd**

**data = pd.read\_csv("https://bit.ly/3V0H3Ox")**

1. Display Shape of panda DataFrame [1]
2. Display all the columns names with its data types [2]
3. Display quick summary of dataset [2]
4. Display top 10 records [2]
5. Display last 10 records [2]
6. Display all the values of TEAM column [2]
7. Count frequency of TEAM values [2]
8. Display unique TEAM values [2]