EduBridge

Scenario Based Question

Topic: SQL

Solution:

Step 1: Create table with all the attributes

CREATE TABLE STUDENT (Enrollment No integer PRIMARY KEY, Student Name text, Section text, Subject ID integer, Marks integer);

Step 2: Insert the entries into the table

/* Create few records in this table */

INSERT INTO STUDENT VALUES(1,'Tim', 'A', 1, 70);

INSERT INTO STUDENT VALUES(2,'Jim', 'A', 2, 75);

There are 3 sub section in the below query

Step 3 a: Use COUNT() to count the number of students whose Marks >=75

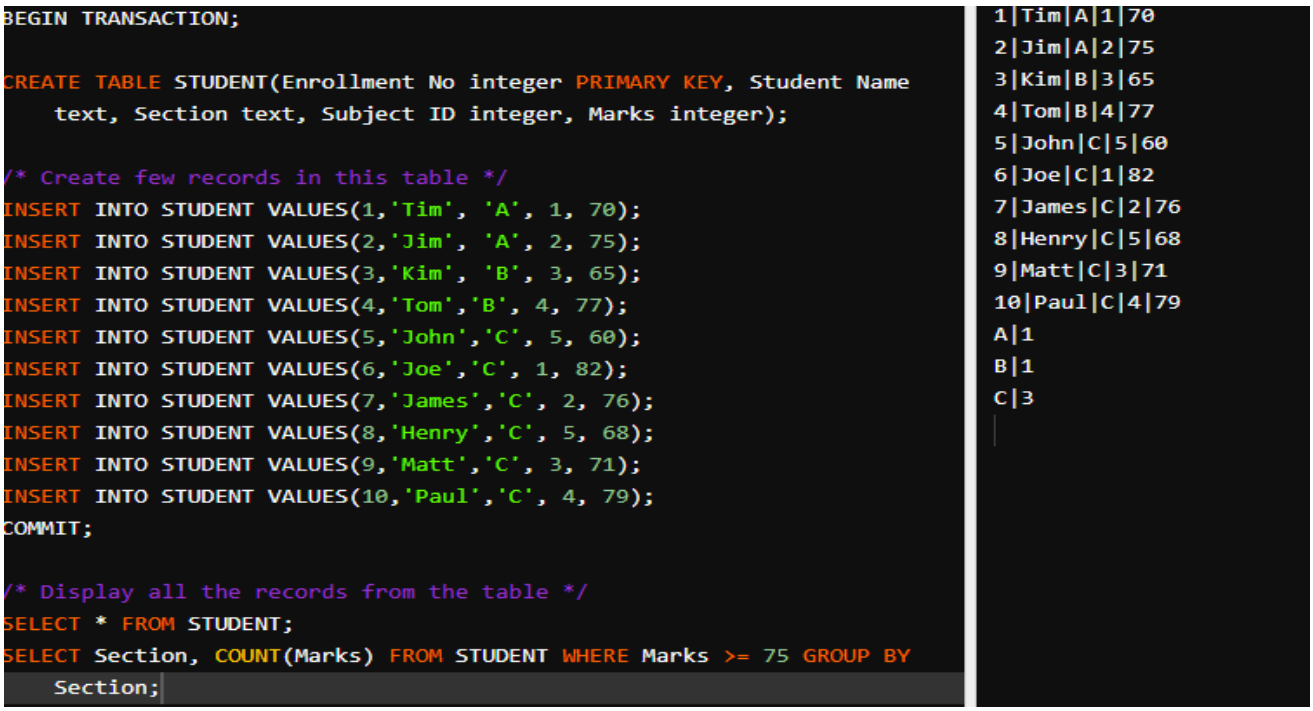
Step 3 b: Use GROUP BY() to aggregate the count based on Section

Step 3 c: Display Section and Count

/* Display section-wise Number of candidates who have secured more than or equal to 75 marks in the Semester Exam */

SELECT Section, COUNT(Marks) FROM STUDENT WHERE Marks >= 75 GROUP BY Section;

Screenshot:



```
BEGIN TRANSACTION;

CREATE TABLE STUDENT(Enrollment No integer PRIMARY KEY, Student Name
    text, Section text, Subject ID integer, Marks integer);

/* Create few records in this table */
INSERT INTO STUDENT VALUES(1,'Tim', 'A', 1, 70);
INSERT INTO STUDENT VALUES(2,'Jim', 'A', 2, 75);
INSERT INTO STUDENT VALUES(3,'Kim', 'B', 3, 65);
INSERT INTO STUDENT VALUES(4,'Tom','B', 4, 77);
INSERT INTO STUDENT VALUES(5,'John','C', 5, 60);
INSERT INTO STUDENT VALUES(6,'Joe','C', 1, 82);
INSERT INTO STUDENT VALUES(7,'James','C', 2, 76);
INSERT INTO STUDENT VALUES(8,'Henry','C', 5, 68);
INSERT INTO STUDENT VALUES(9,'Matt','C', 3, 71);
INSERT INTO STUDENT VALUES(10,'Paul','C', 4, 79);
COMMIT;

/* Display all the records from the table */
SELECT * FROM STUDENT;
SELECT Section, COUNT(Marks) FROM STUDENT WHERE Marks >= 75 GROUP BY
    Section;
```

```
1|Tim|A|1|70
2|Jim|A|2|75
3|Kim|B|3|65
4|Tom|B|4|77
5|John|C|5|60
6|Joe|C|1|82
7|James|C|2|76
8|Henry|C|5|68
9|Matt|C|3|71
10|Paul|C|4|79
A|1
B|1
C|3
```

Topic: Tableau

Solution:

Step 1: Create a calculated field EmployeeId for the column Id

Step 2: Add leading zeros to the Id column and limit the length of the Id to be 7

RIGHT("000000"+[Id], 7)

Step 3: Hide the column Id

Screenshot:

Abc employee.csv Emp name	Abc Calculation Emplo...	# employee.csv Salary
Ravish	0000010	1,000
Suresh	0000101	20,000
Priya	0001010	50,000
Neha	0010101	70,000
Nitin	0001101	15,000

Topic: Excel

Solution:

Step 1: Use COUNTIF() to count the number of times a name is present in column A of the Excel file

=COUNTIF(Where do you want to look?, What do you want to look for?)

=COUNTIF(A:A, A2)

Step 2: If the count of the name is greater than one then it is a duplicate

=COUNTIF(A:A, A2)>1

Step 3: Use IF() and mention the labels as Name and Space for duplicate and unique entries respectively

=IF(COUNTIF(A:A, A2)>1, A2," ")

Topic: Machine Learning

Solution: Refer Machine_Learning.ipynb

Output:

Classifier used	Test Accuracy	Output File
Logistic Regression	0.8735	output.csv
SVM	0.8852	output2.csv