Tasks:

PART 1:

- 1.Write a program to display "Welcome" if a number entered by user is a multiple of five otherwise print "Bye"
- 2. Write a program to find the largest number out of three numbers excepted from user
- 3. Write a program to accept a number from 1 to 7 and display the name of the day like 1 for Sunday, 2 for Monday and so on
- 4. Accept any city from the user and display monument of that city

CityMonumentDelhiRed FortAgraTaj MahalJaipurJal Mahal

5. Write a program to accept two numbers and mathematical operators and perform operation accordingly

Like:

Enter First Number: 7
Enter Second Number: 9

Enter operator: + (you can use different operators as well)

Your Answer is: 16

6. Check if the input is Leap Year, write a function

We add a Leap Day on February 29, almost every four years.

The leap day is an extra, or intercalary day and we add it to the shortest month of the year, February.

In the Gregorian calendar three criteria must be taken into account to identify leap years:

- 1. The year can be evenly divided by 4, is a leap year, unless:
- 2. The year can be evenly divided by 100, it is NOT a leap year, unless:
- 3. The year is also evenly divisible by 400. Then it is a leap year.

Examples: This means that in the Gregorian calendar, the years 2000 and 2400 are leap years, while 1800, 1900, 2100, 2200, 2300 and 2500 are NOT leap years.

What you have to do?

You are given the year, and you have to write a function to check if the year is leap or not. Note that you have to complete the function and remaining code is given as template.

You can use a variable as input with a fix value of user input

7. Rock Paper Scissors, if else or while?

Make a two-player Rock-Paper-Scissors game. (Hint: Ask for player plays (using input), compare them, print out a message of congratulations to the winner, and ask if the players want to start a new game)

Remember the rules:

- 1. Rock beats scissors
- 2. Scissors beats paper
- 3. Paper beats rock

If you don't know what is this game, go watch it:)

PART 2:

Suppose you are a data analyst in a company & You have been provided with the HR dataset, now they want you to find certain insights in the organization.

Now your task is to do data exploration, data preprocessing & find out the necessary insights they are looking for, the questions are as follows:

- i) Import the data & check the head, tail for it.
- ii) Check the shape, size of the data.
- iii) How many columns have categorical features?
- iv) How many unique values are present in RaceDesc column?
- v) Check for mean, max .value, min .value, count, standard deviation of ManagerID column.
- vi) Count the no of categorical, numerical columns.
- vii) Make a diversity report about the dataset.
- viii) Which columns have correlation with each other, what will you interpret from it.
- ix) Add a new column which specifies the number of characters in Employee_Name column.
- x) Round up the values in EngagementSurvey column.
- xi) Check for
- a. Does marital status have any impact on salary?
- b. Does RaceDesc have any impact on EmpSatisfaction?
- c. Is there any correlation between EngagementSurvey and EmpSatisfaction.