**Assignment - 6 Full Stack Web Development using Python MySirG**

**Decision Control**

**1. Write a python script to check whether a given number is positive or non-positive**

*#Write a python script to check whether a given number is positive or non-positive*a=int(input("enter the number"))  
if a>0:  
 print("positive")  
else:  
 print("negative")

**2. Write a python script to check whether a given number is divisible by 5 or not**

a=int(input("enter the number"))  
if a%5==0:  
 print("it is divisible")  
else:  
 print("its isnt")

**3. Write a python script to check whether a given number is even or odd**

a=int(input("enter the number"))  
if a%2==0:  
 print("even")  
else:  
 print("odd")

**4. Write a python script to print greater between two numbers. Print number only once**

**even if the numbers are the same.**

a=int(input("enter the first number"))  
b=int(input("enter the second number"))  
if a>b:  
 print("first number is greater")  
else:  
 print("second number is greate")

**5. Write a python script to print two given words in dictionary order**

def print\_in\_dictionary\_order(word1, word2):  
 if word1.lower() < word2.lower():  
 print(word1, word2)  
 else:  
 print(word2, word1)  
  
*# Example usage*word1 = input("Enter the first word: ")  
word2 = input("Enter the second word: ")  
  
print("Words in dictionary order:")  
print\_in\_dictionary\_order(word1, word2)

**6. Write a python script to check whether a given number is a three digit number or not.**

def is\_three\_digit\_number(number):  
 if 100 <= number < 1000:  
 return True  
 else:  
 return False  
num = int(input("Enter a number: "))  
  
if is\_three\_digit\_number(num):  
 print(f"{num} is a three-digit number.")  
else:  
 print(f"{num} is not a three-digit number.")

**7. Write a python script to check whether a given number is positive, negative or zero.**

*#Write a python script to check whether a given number is positive, negative or zero.*a=int(input('enter a desired number'))  
if a>0:  
 print("number is positive")  
if a==0:  
 print("number is zero")  
else:  
 print("number is negative")

**8. Write a python script to check whether a given quadratic equation has two real &**

**distinct roots, real & equal roots or imaginary roots**

import math  
  
def check\_quadratic\_roots(a, b, c):  
 discriminant = b\*\*2 - 4\*a\*c  
  
 if discriminant > 0:  
 return "Two real and distinct roots"  
 elif discriminant == 0:  
 return "Real and equal roots"  
 else:  
 return "Imaginary roots"  
  
*# Example usage*a = float(input("Enter the coefficient of x^2: "))  
b = float(input("Enter the coefficient of x: "))  
c = float(input("Enter the constant term: "))  
  
result = check\_quadratic\_roots(a, b, c)  
print("Roots of the quadratic equation:", result

**9. Write a python script to check whether a given year is a leap year or not.**

def is\_leap\_year(year):  
 if year % 4 == 0:  
 if year % 100 == 0:  
 if year % 400 == 0:  
 return True *# Divisible by 400, leap year* else:  
 return False *# Divisible by 100 but not 400, not a leap year* else:  
 return True *# Divisible by 4 but not 100, leap year* else:  
 return False *# Not divisible by 4, not a leap year  
  
# Example usage*year = int(input("Enter a year: "))  
  
if is\_leap\_year(year):  
 print(f"{year} is a leap year.")  
else:  
 print(f"{year} is not a leap year.")

**10. Write a python script to print greater among three numbers. Print number only once**

**even if the numbers are the same.**

def print\_greatest\_number(a, b, c):  
 greatest\_number = max(a, b, c)  
 print("The greatest number is:", greatest\_number)  
  
*# Example usage*num1 = float(input("Enter the first number: "))  
num2 = float(input("Enter the second number: "))  
num3 = float(input("Enter the third number: "))  
  
print("Comparing the numbers...")  
print\_greatest\_number(num1, num2, num3)