Assignment 6

Decision Control

1. Write a python script to checkeh wheather a given number is positive or non-positive.

=>

```
num = float (input ("Enter a number:\t"))
print ('the number is positive') if num>0 else print ('the number is non positive')
```

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

=>

```
num = float (input ("Enter a number:\t"))
print ('It is divisible by 5') if num%5==0 else print ('It is not divisible by 5')
```

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

=>

```
num = float (input ('Enter a number:\t'))
print ('It is odd') if num%2 !=0 else print ('It is even')
```

4. Write a python script to print greater between two numbers. print number only once even if the number are the same.

=>

```
print ("Enter two numbers:")
x, y = float (input()), float (input())
if x>y:
    print ('the greatest number is', x)
elif y>x:
    print ('the greatest number is', y)
else:
    print (f"the number {x} is same")
```

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

=>

```
print ('Enter two word:')
x,y =str(input()), str(input())
print(x,'\n'+y) if x<y else print(y,'\n'+x)
```

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

=>

```
num = int(input('Enter a number:'))
print('This is a 3 digit number') if (num>99 and num<1000) else
                                print ('This is not a 3 digit numbe')
```

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

=>

```
num = float(int('Enter a number:'))
if num>0:
    print('The number is positive')
elif num<0:
    print ('The number is negative')

else:
    print ('This is zero')
```

8. Write a python script to check wheather a given quadritic equation has two real and distinct roots, real & equal roots or imaginary roots.

=>

```
a,b,c = float(input('Enter the value of a,b,e of a quadritic
    equation')), float(input()), float(input())

discriment = (b**2)-4*a*c
if discriment >0:
    print('The equation has two real and distinct root')
elif ~~distine~~ discrimen<0:
    print('The equation has imaginary root')
```

```
else:
    print('The equation has real and equal root')
```

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

⇒

```
year = int(input('Enter a year:'))
if (year%400==0 and year%100==0) or (year%4==0 and year%100!=0):
    print('This is a leap year')
else:
    print('This 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:

⇒

```
n1,n2,n3 = float(input('Enter three number')),float(input()),float(
                                                        input())
if n1>n2:
    if n1>n3:
        print('The greatest number is', n1)
    else:
        print('The greatest number is', n3)
elif n2>n3: print('The greatest number is', n2)
else: Print('The greatest number is', n3)
```

11. Write a python script to take the month value in numeric format and display the number of days in it.

⇒

```
m = int(input('Enter month number:\n'))
if m>0 and m<=7 and m%2!=0: print('The number of days is 31')
elif m>7 and m<=12 and m%2==0: print('The number of days is 31')
else:
    print('The number of days is 30')
```

12. Write a python script to accept one complex number from the user and display the greater number between real part and imaginary part.

⇒

```
cn = complex(input('Enter the complex number:\n'))
if cn.real > cn.imag:
    print('The greater number is', cn.real)
else:
    print('The greater number is', cn.imag)
```