

Assignment - 6

Q1. ''' To check whether a given number is positive or non-positive '''

```
num = int(input("Enter a number"))
```

```
if num > 0:
```

```
    print("Number is positive")
```

```
else:
```

```
    print("Number is non-positive")
```

Q2. ''' To check whether a given number is divisible by 5 or not. '''

```
num1 = int(input("Enter a number"))
```

```
if num1 % 5 == 0:
```

```
    print("Number is divisible by 5")
```

```
else:
```

```
    print("Number is not divisible by 5")
```

Q3. ''' To check whether a given number is even or odd. '''

```
num = int(input("Enter a number = "))
```

```
if num % 2 == 0:
```

```
    print("Number is even")
```

```
else:
```

```
    print("Number is odd")
```

Q4. ''' To print two given word in dictionary order'''

```
print("Enter two words")
```

```
word1, word2 = input(), input()
```

```
if word1 > word2:
```

```
    print(word2, word1)
```

```
else:
```

```
    print(word1, word2)
```


Q4. "To print greater between two numbers. Print number only once even if the numbers are the same."

```
print("Enter two numbers")
```

~~a, b = input~~

```
a, b = int(input()), int(input())
```

```
if a > b:
```

```
    print(a)
```

```
else:
```

```
    print(b)
```

Q6. "To check whether a given number is a three digit number or not"

```
print("Enter two numbers")
```

```
num = int(input())
```

```
print("Number is 3-digit" if 99 < num < 1000 else "Number is not 3-digit")
```

Q7. "To check whether a given number is positive, negative or zero."

```
num = int(input("Enter a number"))
```

```
if num > 0:
```

```
    print("positive")
```

```
elif num < 0:
```

```
    print("negative")
```

```
else:
```

```
    print("zero")
```

Q8. "To check a given quadratic equation has two real & distinct roots, real & equal roots, or imaginary roots."

```
print("Enter a, b and c")
```

```
a, b, c = int(input()), int(input()), int(input())
```

```
d = b**2 - 4*a*c
```

```
if d > 0:
```

```
    print("real and distinct")
```

```
elif d == 0:
```

```
    print("real and equal")
```

```
else:
```

```
    print("imaginary")
```


Q9. """ To check whether a given year is a leap year or not. """

```
print ("Enter a number of Year ")
```

```
year = int(input())
```

```
if year % 400 == 0:
```

```
    print ("Leap year")
```

```
elif year % 100 != 0 and year % 4 == 0:
```

```
    print ("Leap Year")
```

```
else:
```

```
    print ("Not Leap year")
```

Q10. """ To print greater among three numbers. Print number only once even if ~~days in it~~ are the same """

```
print ("Enter three numbers ")
```

```
num1, num2, num3 = int(input()), int(input()), int(input())
```

```
if num1 > num2:
```

```
    if num1 > num3:
```

```
        print ("Num1 is greater =", num1)
```

```
    else: print ("Num3 is greater =", num3)
```

```
elif num2 > num3:
```

```
    print ("Num2 is greater", num2)
```

```
else:
```

```
    print ("Num3 is greater", num3)
```

Q11. """ To take month value in numeric format and display the number of days in it.


```
print ("Enter month number")
```

```
month = int(input())
```

```
if month in (1, 3, 5, 7, 8, 10, 12):  
    print ("31 days")
```

```
elif month in (4, 6, 9, 11):  
    print ("30 days")
```

```
elif month == 2:  
    print ("28 & 29 days")
```

```
else:  
    print ("Please select a valid month")
```

Q12: " To accept one complex number from the user and display the greater number between real part and imaginary part."

```
x = complex(input("Enter a complex number"))
```

```
print (x.real if x.real > x.imag else x.imag)
```