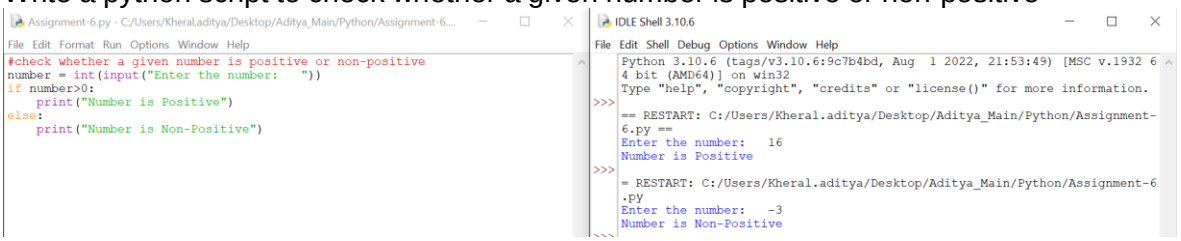
Assignment - 6 Full Stack Web Development using Python MySirG

Decision Control

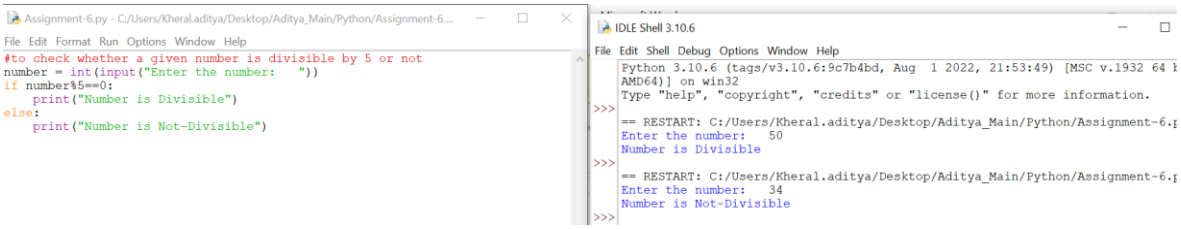
1. Write a python script to check whether a given number is positive or non-positive



```
#check whether a given number is positive or non-positive
number = int(input("Enter the number:   "))
if number>0:
    print("Number is Positive")
else:
    print("Number is Non-Positive")
```

```
Python 3.10.6 (tags/v3.10.6:9c7b4bd, Aug  1 2022, 21:53:49) [MSC v.1932 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
== RESTART: C:/Users/Kheral.aditya/Desktop/Aditya_Main/Python/Assignment-6.py ==
Enter the number:   16
Number is Positive
>>>
= RESTART: C:/Users/Kheral.aditya/Desktop/Aditya_Main/Python/Assignment-6.py
Enter the number:   -3
Number is Non-Positive
>>>
```

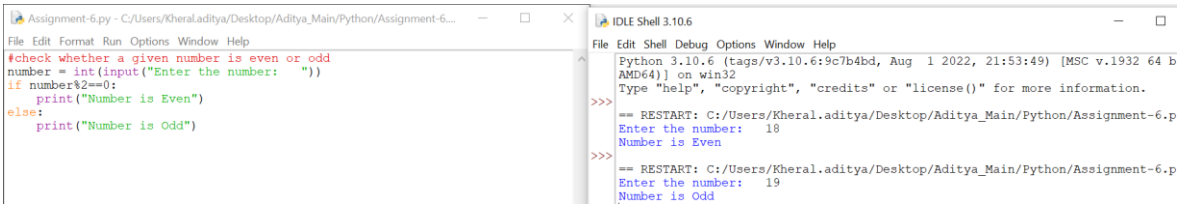
2. Write a python script to check whether a given number is divisible by 5 or not



```
#to check whether a given number is divisible by 5 or not
number = int(input("Enter the number:   "))
if number%5==0:
    print("Number is Divisible")
else:
    print("Number is Not-Divisible")
```

```
Python 3.10.6 (tags/v3.10.6:9c7b4bd, Aug  1 2022, 21:53:49) [MSC v.1932 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
== RESTART: C:/Users/Kheral.aditya/Desktop/Aditya_Main/Python/Assignment-6.py
Enter the number:   50
Number is Divisible
>>>
== RESTART: C:/Users/Kheral.aditya/Desktop/Aditya_Main/Python/Assignment-6.py
Enter the number:   34
Number is Not-Divisible
>>>
```

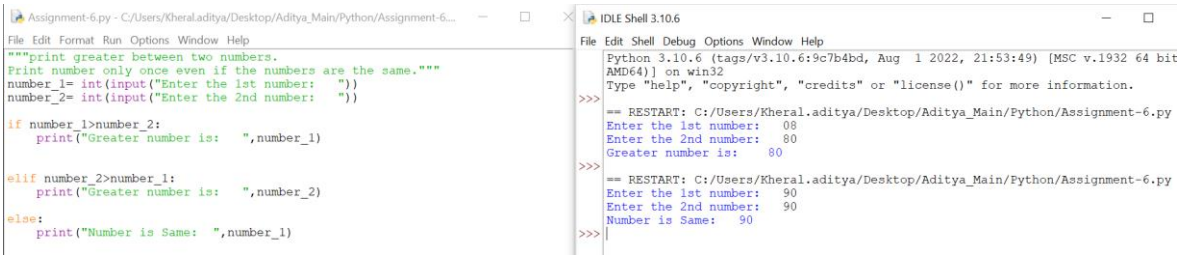
3. Write a python script to check whether a given number is even or odd



```
#check whether a given number is even or odd
number = int(input("Enter the number:   "))
if number%2==0:
    print("Number is Even")
else:
    print("Number is Odd")
```

```
Python 3.10.6 (tags/v3.10.6:9c7b4bd, Aug  1 2022, 21:53:49) [MSC v.1932 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
== RESTART: C:/Users/Kheral.aditya/Desktop/Aditya_Main/Python/Assignment-6.py
Enter the number:   18
Number is Even
>>>
== RESTART: C:/Users/Kheral.aditya/Desktop/Aditya_Main/Python/Assignment-6.py
Enter the number:   19
Number is Odd
```

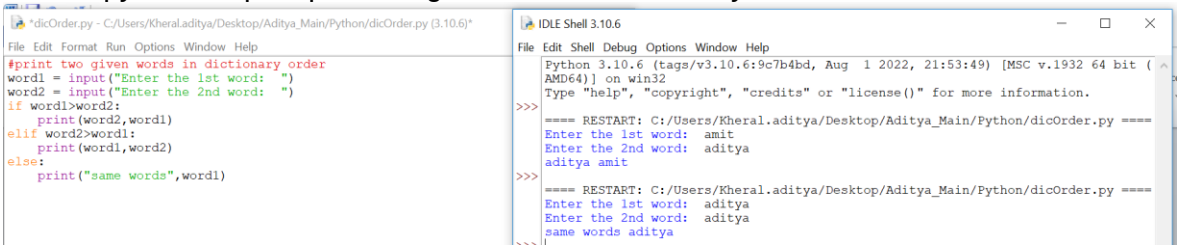
4. Write a python script to print greater between two numbers. Print number only once even if the numbers are the same.



```
"""print greater between two numbers.
Print number only once even if the numbers are the same."""
number_1= int(input("Enter the 1st number:   "))
number_2= int(input("Enter the 2nd number:   "))

if number_1>number_2:
    print("Greater number is:   ",number_1)

elif number_2>number_1:
    print("Greater number is:   ",number_2)

else:
    print("Number is Same:  ",number_1)
```

```
Python 3.10.6 (tags/v3.10.6:9c7b4bd, Aug  1 2022, 21:53:49) [MSC v.1932 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
== RESTART: C:/Users/Kheral.aditya/Desktop/Aditya_Main/Python/Assignment-6.py
Enter the 1st number:   08
Enter the 2nd number:   80
Greater number is:   80
>>>
== RESTART: C:/Users/Kheral.aditya/Desktop/Aditya_Main/Python/Assignment-6.py
Enter the 1st number:   90
Enter the 2nd number:   90
Number is Same:  90
>>>
```

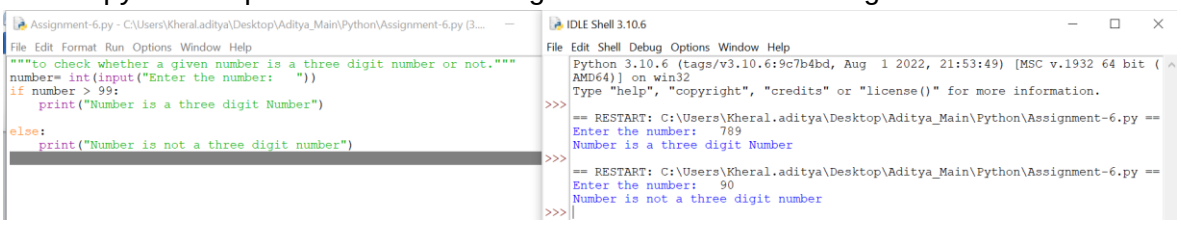
5. Write a python script to print two given words in dictionary order



```
#print two given words in dictionary order
word1 = input("Enter the 1st word:  ")
word2 = input("Enter the 2nd word:  ")
if word1>word2:
    print(word2,word1)
elif word2>word1:
    print(word1,word2)
else:
    print("same words",word1)
```

```
Python 3.10.6 (tags/v3.10.6:9c7b4bd, Aug  1 2022, 21:53:49) [MSC v.1932 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
==== RESTART: C:/Users/Kheral.aditya/Desktop/Aditya_Main/Python/dicOrder.py ====
Enter the 1st word:  amit
Enter the 2nd word:  aditya
aditya amit
>>>
==== RESTART: C:/Users/Kheral.aditya/Desktop/Aditya_Main/Python/dicOrder.py ====
Enter the 1st word:  aditya
Enter the 2nd word:  aditya
same words aditya
```

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



```
"""to check whether a given number is a three digit number or not."""
number= int(input("Enter the number:   "))
if number > 99:
    print("Number is a three digit Number")

else:
    print("Number is not a three digit number")
```

```
Python 3.10.6 (tags/v3.10.6:9c7b4bd, Aug  1 2022, 21:53:49) [MSC v.1932 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
== RESTART: C:\Users\Kheral.aditya\Desktop\Aditya_Main\Python\Assignment-6.py ==
Enter the number:   789
Number is a three digit Number
>>>
== RESTART: C:\Users\Kheral.aditya\Desktop\Aditya_Main\Python\Assignment-6.py ==
Enter the number:   90
Number is not a three digit number
>>>
```

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

```
#check whether a given number is positive, negative or zero.
number= int(input("Enter the number:   "))
if number > 0:
    print("Positive Number")

elif number < 0 :
    print("Negative Number")
else:
    print("Zero")
```

```
Python 3.10.6 (tags/v3.10.6:9c7b4bd, Aug  1 2022, 21:53:49) [MSC v.1932 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
== RESTART: C:\Users\Kheral.aditya\Desktop\Aditya_Main\Python\Assignment-6.py ==
Enter the number:   987
Positive Number
>>>
== RESTART: C:\Users\Kheral.aditya\Desktop\Aditya_Main\Python\Assignment-6.py ==
Enter the number:   -98
Negative Number
>>>
== RESTART: C:\Users\Kheral.aditya\Desktop\Aditya_Main\Python\Assignment-6.py ==
Enter the number:   0
Zero
>>>
```

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

```
# python script to check whether a given quadratic equation has two real & di

a = int(input("Enter the value of a:    "))
b = int(input("Enter the value of b:    "))
c = int(input("Enter the value of c:    "))

if a == 0:
    print("Input correct quadratic equation")
dis = b * b - 4 * a * c
if dis > 0:
    print(" real and distinct roots ")


elif dis == 0:
    print(" real and equal roots")

else:
    print("Imaginary Roots")
```

```
Python 3.10.6 (tags/v3.10.6:9c7b4bd, Aug  1 2022, 21:53:49) [MSC v.1932 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
= RESTART: C:/Users/Kheral.aditya/Desktop/Aditya_Main/Python/Assignment/Assignment-6/check complex number.py
Enter the value of a:    10
Enter the value of b:    27
Enter the value of c:    65
Imaginary Roots
>>>
= RESTART: C:/Users/Kheral.aditya/Desktop/Aditya_Main/Python/Assignment/Assignment-6/check complex number.py
Enter the value of a:    98
Enter the value of b:    24
Enter the value of c:    13
Imaginary Roots
>>>
= RESTART: C:/Users/Kheral.aditya/Desktop/Aditya_Main/Python/Assignment/Assignment-6/check complex number.py
Enter the value of a:    1
Enter the value of b:    2
Enter the value of c:    1
 real and equal roots
>>>
= RESTART: C:/Users/Kheral.aditya/Desktop/Aditya_Main/Python/Assignment/Assignment-6/check complex number.py
Enter the value of a:    2
Enter the value of b:    2
Enter the value of c:    1
Imaginary Roots
>>>
= RESTART: C:/Users/Kheral.aditya/Desktop/Aditya_Main/Python/Assignment/Assignment-6/check complex number.py
Enter the value of a:    1
Enter the value of b:    10
Enter the value of c:    -24
 real and distinct roots
>>>
```

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

```
#script to check whether a given year is a leap year or not.
year = int(input("Enter the year:   "))

if year%400 == 0 and year%100 == 0 :
    print("Yes the year is Leap Year")

elif year%4 == 0 and year%100 != 0 :
    print("Yes the year is Leap Year")

else:
    print("Not a Leap Year")
```

```
Python 3.10.6 (tags/v3.10.6:9c7b4bd, Aug  1 2022, 21:53:49) [MSC v.1932 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
== RESTART: C:\Users\Kheral.aditya\Desktop\Aditya_Main\Python\Assignment-6.py ==
Enter the year:   2017
Not a Leap Year
>>>
== RESTART: C:\Users\Kheral.aditya\Desktop\Aditya_Main\Python\Assignment-6.py ==
Enter the year:   1900
Not a Leap Year
>>>
== RESTART: C:\Users\Kheral.aditya\Desktop\Aditya_Main\Python\Assignment-6.py ==
Enter the year:   2000
Yes the year is Leap Year
>>>
== RESTART: C:\Users\Kheral.aditya\Desktop\Aditya_Main\Python\Assignment-6.py ==
Enter the year:   2012
Yes the year is Leap Year
>>>
```

10. Write a python script to print greater among three numbers. Print number only once even if the numbers are the same.

```
#check whether a given number is positive, negative or zero.
number_1= int(input("Enter the 1st number:   "))
number_2= int(input("Enter the 2nd number:   "))
number_3= int(input("Enter the 3rd number:   "))
if number_1>number_2 and number_1>number_3:
    print("Greater number is:   ",number_1)

elif number_2>number_1 and number_2>number_3:
    print("Greater number is:   ",number_2)

elif number_3>number_1 and number_3>number_2:
    print("Greater number is:   ",number_3)

else:
    print("The number is same:  ",number_1)
```

```
Python 3.10.6 (tags/v3.10.6:9c7b4bd, Aug  1 2022, 21:53:49) [MSC v.1932 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
== RESTART: C:\Users\Kheral.aditya\Desktop\Aditya_Main\Python\Assignment-6.py
Enter the 1st number:   98
Enter the 2nd number:   87
Enter the 3rd number:   100
Greater number is:    100
>>>
== RESTART: C:\Users\Kheral.aditya\Desktop\Aditya_Main\Python\Assignment-6.py
Enter the 1st number:   100
Enter the 2nd number:   98
Enter the 3rd number:   87
Greater number is:    100
>>>
== RESTART: C:\Users\Kheral.aditya\Desktop\Aditya_Main\Python\Assignment-6.py
Enter the 1st number:   90
Enter the 2nd number:   90
Enter the 3rd number:   90
The number is same:   90
>>>
```

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

```
#take the month value in numeric format and display the number of days in it.
number= int(input("Enter the month in number:   "))
if (number==1 or number==3 or number==5 or number==7 or number==8 or number==
    or number==12):
    print("Number of days in a month is :    ", 31)

elif number == 2:
    print("Number of days in a month is :    ",28)

elif number>12:
    print("invalid Input")

else:
    print("Number of days in a month is :    ",30)
```

```
Python 3.10.6 (tags/v3.10.6:9c7b4bd, Aug  1 2022, 21:53:49) [MSC v.1932 64 bit
AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
== RESTART: C:\Users\Kheral.aditya\Desktop\Aditya_Main\Python\Assignment-6.py
Enter the month in number:   3
Number of days in a month is :     31
>>>
== RESTART: C:\Users\Kheral.aditya\Desktop\Aditya_Main\Python\Assignment-6.py
Enter the month in number:   2
Number of days in a month is :     28
>>>
== RESTART: C:\Users\Kheral.aditya\Desktop\Aditya_Main\Python\Assignment-6.py
Enter the month in number:   4
Number of days in a month is :     30
>>>
== RESTART: C:\Users\Kheral.aditya\Desktop\Aditya_Main\Python\Assignment-6.py
Enter the month in number:   13
invalid Input
>>>
```

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

```
x= complex (input("Enter the Complex Number:  "))
if x.real>=x.imag:
    print("greater number ",x.real)
else:
    print("greater number ",x.imag)
```

```
Python 3.10.6 (tags/v3.10.6:9c7b4bd, Aug  1 2022, 21:53:49) [MSC v.1932 6
4 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
= RESTART: C:/Users/Kheral.aditya/Desktop/Aditya_Main/Python/Assignment/A
ssignment-6/addition of complex number.py
Enter the Complex Number:  17+9j
greater number  17.0
>>>
= RESTART: C:/Users/Kheral.aditya/Desktop/Aditya_Main/Python/Assignment/A
ssignment-6/addition of complex number.py
Enter the Complex Number:  9+17j
greater number  17.0
>>>
```