Assignment # 01

Q # 01

Underscore in Python

In [2]:
```
# We use underscore to ingnore the values when we are decalaring variables.
# we can give the values to the "_" varaible.
# underscore is useful when we want to ignore some of the values

### Danish Ul Hassan
## Example of Underscore

num1, _, num2 = 10, 20, 20;
print(num1)
print(num2)
```

```
10
20
```

Q # 02

In [8]:
```
## Example # 01
value_1 = 2+(5-2)/6
print(value_1)
print(type(value_1))
#Danish Ul Hassan
#Converting the value into int
value_1 = int(value_1)
print(value_1)
print(type(value_1))

## Example # 02
value_2 = 4/5 + ( 10-3 ) /6
print(value_2)
print(type(value_2))
#Danish Ul Hassan
#Converting the value into int
value_2 = int(value_2)
print(value_2)
print(type(value_2))
```

```
2.5
<class 'float'>
2
<class 'int'>
1.9666666666666668
<class 'float'>
1
<class 'int'>
```

Q # 03

In [29]:
```
# Even Numbers from 0-50 using for Loop

initial, final = 0, 51
print("For Loop:")
for value in range(initial, final + 1):

    # checking condition
    if value % 2 == 0:
        print(value, end = " ")

#using while loop
i = 0
print("\n While Loop:")
while i <= 48:
   i += 2
   print(i, end=" ")
```

```
For Loop:
0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 32 34 36 38 40 42 44 46 48 50
 While Loop:
2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 32 34 36 38 40 42 44 46 48 50
```

Q # 04

In [16]:
```
first = 0
last = 100
```

```
print("Prime numbers: ")
for value in range(first, last + 1):
   if value > 1:
       for i in range(2, value):
           if (value % i) == 0:
               break
       else:
           print(value, end=" ")
```

```
Prime numbers:
2 3 5 7 11 13 17 19 23 29 31 37 41 43 47 53 59 61 67 71 73 79 83 89 97
```

Q # 05

In [22]:
```
#dansih Ul Hassan
def hashing(n):
    for i in range(0, value):
        for j in range(0, i+1):
            print("# ",end="")
        print("\r")

value = 7
hashing(value)
```

```
#
# #
# # #
# # # #
# # # # #
# # # # # #
# # # # # # #
```

Q # 07

In [ ]:
```
for value in range(100):
    print(value)

max=int(input("please enter the maximum value: "))
even_Sum=0
odd_Sum=0

for num in range(1,max+1):
    if (num%2==0):
        even_Sum=even_Sum+num
    else:
        odd_Sum=odd_Sum+num

print("The sum of Even numbers 1 to {0} = {1}".format(num,even_Sum))
print("The sum of odd numbers 1 to {0} = {1}".format(num,odd_Sum))
```

Q # 08

In [5]:
```
#Write a Python program to find those numbers which are divisible by 7 and multiple of 5, between 1500 and 2700 (both included).
numbers=[]
for num in range(1500, 2701):
    if (num%7==0) and (num%5==0):
        numbers.append(str(num))
print (','.join(numbers))
```

```
1505,1540,1575,1610,1645,1680,1715,1750,1785,1820,1855,1890,1925,1960,1995,2030,2065,2100,2135,2170,2205,2240,2275,2310,2345,23
80,2415,2450,2485,2520,2555,2590,2625,2660,2695
```

Q # 09

In [1]:
```
#Number Guessing Game using random module

import random
target_num, guess_num = random.randint(1, 9), 0
while target_num != guess_num:
    guess_num = int(input('Guess a number between 1 to 9 : '))
print('Congratulations!!!')
```

```
Guess a number between 1 to 9 : 7
Guess a number between 1 to 9 : 9
Guess a number between 1 to 9 : 5
Guess a number between 1 to 9 : 8
Guess a number between 1 to 9 : 1
Guess a number between 1 to 9 : 2
Guess a number between 1 to 9 : 3
Congratulations!!!
```

Q # 10

In [31]:
```
n=5;
for a in range(n):
```

```
    for b in range(a):
        print ('* ', end="")
    print('')

for a in range(n,0,-1):
    for b in range(a):
        print('* ', end="")
    print('')
```

```
*
* *
* * *
* * * *
* * * * *
* * * *
* * *
* *
*
```

Q # 11

In [33]:
```
x,y=0,1
print("Fibonacci Series: ")
while y<100:
    print(y, end= " ")
    x,y = y,x+y
```

```
Fibonacci Series:
1 1 2 3 5 8 13 21 34 55 89
```

ALL Done

In [ ]: