TRABAJO EN CLASE 01

Generar una lista de numeros aleatorios

In [1]:
```
import random
import statistics
```

In [2]:
```
lista = []
for i in range (100):
    lista.append(random.randrange(1, 99))
print (lista)
```

```
[19, 80, 3, 5, 72, 68, 83, 13, 89, 87, 6, 29, 27, 58, 77, 57, 40, 29, 45, 60, 72, 1
8, 43, 77, 54, 82, 17, 86, 12, 59, 94, 33, 84, 23, 19, 12, 96, 89, 93, 84, 84, 2, 4
6, 6, 21, 50, 26, 40, 3, 4, 88, 6, 78, 28, 7, 2, 6, 47, 73, 47, 42, 95, 48, 95, 70,
93, 79, 58, 88, 83, 6, 76, 59, 37, 17, 40, 8, 13, 53, 45, 38, 89, 56, 30, 75, 53, 7
2, 9, 96, 52, 30, 46, 3, 97, 45, 49, 66, 88, 54, 65]
```

Obtener el promedio, la sumatoria, el numero mayor y menor

Promedio

In [3]:
```
promedio = statistics.mean(lista)
print ("Promedio:",promedio)
```

```
Promedio: 49.76
```

Sumatoria

In [4]:
```
suma = sum (lista)
print ("Sumatoria: ",suma)
```

```
Sumatoria:  4976
```

Mayor y Menor

In [5]:
```
mayor = lista[0]
menor = lista[0]
for x in lista:
    if lista[x] > mayor:
        mayor = lista[x]

for y in lista:
    if lista[y] < menor:
        menor = lista[y]

print ("Numero mayor --->", mayor)
print ("Numero menor --->", menor)
```

```
Numero mayor ---> 97
Numero menor ---> 3
```

Numeros Primos

In [6]:

```
def primo(num):
    cont=0;

    for i in range(1,num):
        if(num%i==0):
            cont+=1
            if cont>1:
                return False
    return True
primos = []
for i in lista:
    if i!=1:
        if primo(i):
            primos.append(i)

print ("Lista de numeros primos: ",primos)
```

```
Lista de numeros primos:  [19, 3, 5, 83, 13, 89, 29, 29, 43, 17, 59, 23, 19, 89, 2,
3, 7, 2, 47, 73, 47, 79, 83, 59, 37, 17, 13, 53, 89, 53, 3, 97]
```

In [ ]: