

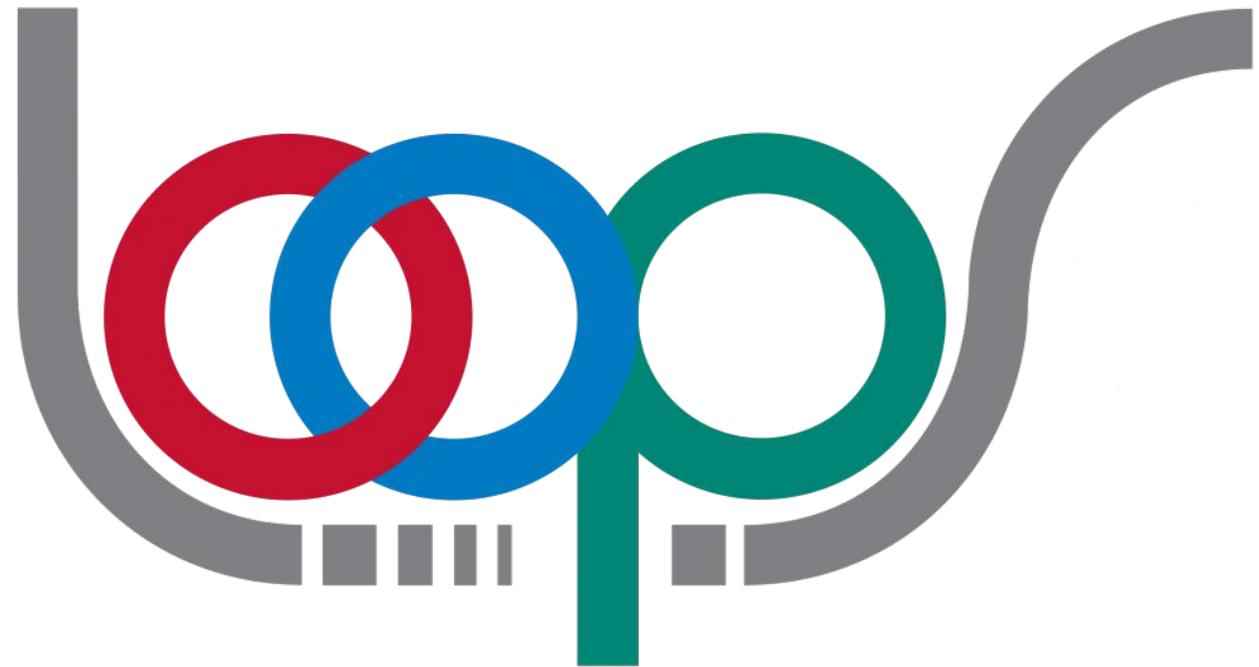


INFORMATICS - 8th

grade

LOOPS

CHAPTER 4.1





You will:

- Understand definition of the Loops in python language;
- Basic concept of iteration;
- Apply 'FOR' loop to solve the problem.



What is the Loop?

- In computer programming, a **loop** is an order of instructions that repeats for many times. Each repetition is called an **iteration of the loop**.





Range:

Range(N)



[0,...,N-1]

Range(3)

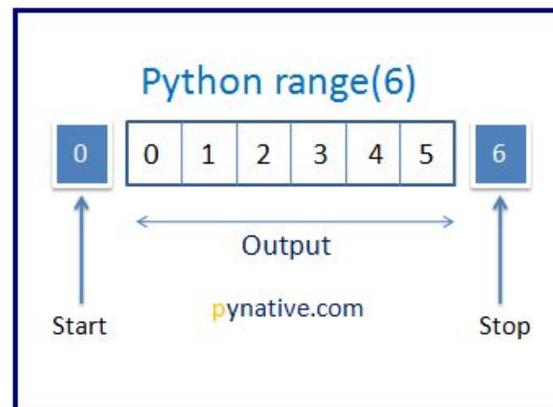


[0,1,2]

Range(10,15)



[10,11,12,13,14]



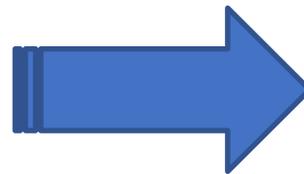
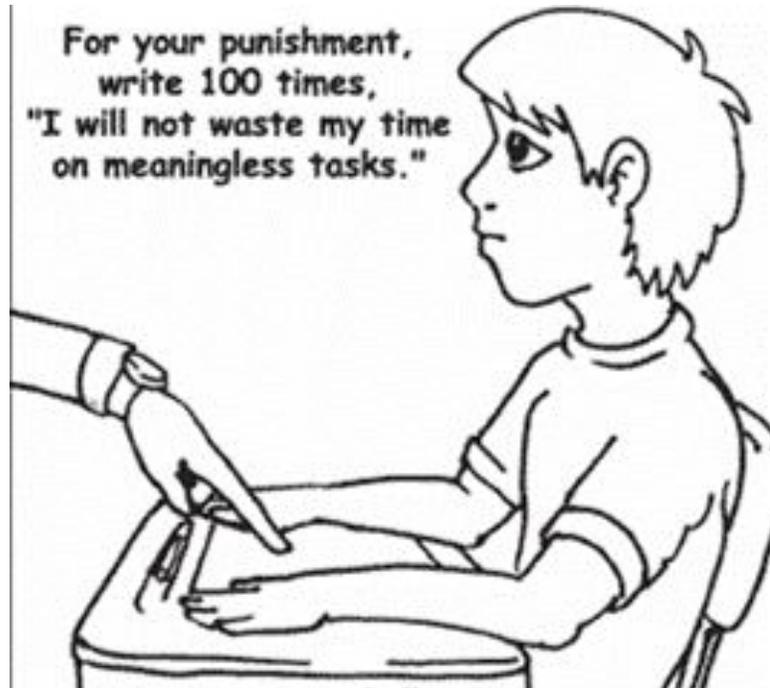


```
For i in range (5)  
    print ("Wash your hands!")
```





Example 1:



```
For i in range (100)  
    print ("I will not  
waste my time on  
meaningless  
tasks!")
```



Example 2:

Write a code that prints all even numbers from 2 to 100 inclusively.



Example 3:

Calculate the sum of even numbers till inputted number
N



Terminology

loop - тізбек - цикл
even - жұп - четные
iteration - итерация - итерация
inclusively - қоса алғанда - включительно
trick - қулық - хитрость
to fix - түзету - исправлять
sum - сома - сумма
divisible - бөлінетін - делимый



Home task

- 1. Write a code that prints all odd numbers from 1 to 100. Example: 1 3 5 7 ... 99 4.
- 2. Write a code that prints all numbers, divisible by 5, starting from 1 to 1000. Example: 1 5 10 15 20 ... 1000 5.
- 3. Write a code that will print sum of all numbers from 1 to 60 inclusively.

