

# Full stack web development using python

## While loop



Saurabh Shukla (MySirG)

# Agenda

- ① Iterative control
- ② while
- ③ Practice problem

# Iterative Control (Loop)

① while

② for

X do while



Keyword

while

False



while condition :

True

code  
code  
code

while  
block



code



Write a program to print MySirG five times.

$i = 1$  ← initialization  
while  $i \leq 5$ : ← condition

print("MySirG")  
 $i + 1$  ← flow

$i = 6$

MySirG  
MySirG  
MySirG  
MySirG  
MySirG

Write a program to print first 10

natural numbers.

1 2 3 4 5 6 7 8 9 10

$i = 1$

while  $i \leq 10$ :

$\text{print}(i, \text{end} = ' ')$

$i = i + 1$

① Read/understand

② Test Case

③ Dry Run

Write a program to print first 10 natural numbers in reverse order

10 9 8 7 6 5 4 3 2 1

$i = 10$

while  $i \geq 1$ :

print( $i$ , end=' ')

$i -= 1$

$i = 1$

while  $i \leq 10$ :

print( $11 - i$ )

$i += 1$

$i$	$11 - i$
1	10
2	9
3	8
4	7
...	...
10	1

Write a program to print first n even natural numbers.

$n=5$

2 4 6 8 10

---

$n=6$

2 4 6 8 10 12

---

$n=10$

2 4 6 8 10 12 14 16 18 20

1 2 3 4 5 6 7 8 9 10 11 12

$i=2$

$n = \text{int}(\text{input}(\text{"Enter a num"}))$

while  $i \leq 2 * n$ :

print( $i$ , end='')

$i = i + 2$