

While Loop

1. Write a python script to print **MySirG** N times on the screen

The screenshot shows a Python script in a text editor and its execution in the IDLE Shell. The script prompts the user to enter the number of times to print 'MySirG'. The user enters 10, and the output shows 'MySirG' printed 10 times on separate lines.

```
while loop.py - C:/Users/Kheraladitya/Desktop/Aditya_Main/Python/Assignment/Assig...
File Edit Format Run Options Window Help
#a python script to print MySirG N times on the screen
n = int(input("Enter the How many times you want to print: "))
i=1
while i<=n:
    print("MySirG")
    print()
    i+=1

IDLE Shell 3.10.6
File Edit Shell Debug Options Window Help
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/Kheraladitya/Desktop/Aditya_Main/Python/Assignment/A
assignment-9/while loop.py
Enter the How many times you want to print: 10
MySirG
MySirG
MySirG
MySirG
MySirG
MySirG
MySirG
MySirG
MySirG
MySirG
```

2. Write a python script to print first N natural numbers

The screenshot shows a Python script in a text editor and its execution in the IDLE Shell. The script prompts the user to enter the number of natural numbers to print. The user enters 10, and the output shows the first 10 natural numbers (1 to 10) printed on separate lines.

```
while loop.py - C:/Users/Kheraladitya/Desktop/Aditya_Main/Python/Assignment/Assig...
File Edit Format Run Options Window Help
#a python script to print first N natural numbers
n = int(input("Enter the Numbers: "))
i=1
while i<=n:
    print(i)
    print()
    i+=1

IDLE Shell 3.10.6
File Edit Shell Debug Options Window Help
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/Kheraladitya/Desktop/Aditya_Main/Python/Assignment/A
assignment-9/while loop.py
Enter the Numbers: 10
1
2
3
4
5
6
7
8
9
10
```

3. Write a python script to print first N natural numbers in reverse order

The screenshot shows a Python script in a text editor and its execution in the IDLE Shell. The script prompts the user to enter the number of natural numbers to print in reverse order. The user enters 10, and the output shows the first 10 natural numbers (10 to 1) printed on separate lines.

```
while loop.py - C:/Users/Kheraladitya/Desktop/Aditya_Main/Python/Assignment/Assig...
File Edit Format Run Options Window Help
#a python script to print first N natural numbers in reverse order
n = int(input("Enter the Numbers: "))
i=0
while i<=n:
    print(n-i)
    print()
    i+=1

IDLE Shell 3.10.6
File Edit Shell Debug Options Window Help
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/Kheraladitya/Desktop/Aditya_Main/Python/Assignment/A
assignment-9/while loop.py
Enter the Numbers: 10
10
9
8
7
6
5
4
3
2
1
```

4. Write a python script to print first N odd natural numbers

The screenshot shows a Python script in a text editor and its execution in the IDLE Shell. The script prompts the user to enter the number of odd natural numbers to print. The user enters 5, and the output shows the first 5 odd natural numbers (1, 3, 5, 7, 9) printed on separate lines. The user then enters 10, and the output shows the first 10 odd natural numbers (1, 3, 5, 7, 9, 11, 13, 15, 17, 19) printed on separate lines.

```
while loop.py - C:/Users/Kheraladitya/Desktop/Aditya_Main/Python/Assignment/Assig...
File Edit Format Run Options Window Help
#a python script to print first N odd natural numbers
n = int(input("Enter the Numbers: "))
i=1
j = 1
while i<=2*n:
    if i%2!=0:
        print(i)
        i+=1
    else:
        i+=1

IDLE Shell 3.10.6
File Edit Shell Debug Options Window Help
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/Kheraladitya/Desktop/Aditya_Main/Python/Assignment/A
assignment-9/while loop.py
Enter the Numbers: 5
1
3
5
7
9
>>> = RESTART: C:/Users/Kheraladitya/Desktop/Aditya_Main/Python/Assignment/A
assignment-9/while loop.py
Enter the Numbers: 10
1
3
5
7
9
11
13
15
17
19
```

5. Write a python script to print first N odd natural numbers in reverse order

```
whileloop.py - C:/Users/Kheral.aditya/Desktop/Aditya_Main/Python/Assignment/Assign...
File Edit Format Run Options Window Help
#python script to print first 10 odd natural numbers in reverse order
n = int(input("Enter the number: "))
i = 1
j = 0
count = 2*n-1
while (i<=n):
    rev = count - j
    print(rev)
    print(i)
    j+=2
    i+=1

IDLE Shell 3.10.6
File Edit Shell Debug Options Window Help
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-8/whileloop.py
Enter the number: 10
19
17
15
13
11
9
7
5
3
1
```

6. Write a python script to print first N even natural numbers

```
whileloop.py - C:/Users/Kheral.aditya/Desktop/Aditya_Main/Python/Assignment/Assign...
File Edit Format Run Options Window Help
#python script to print first 10 even natural numbers
n = int(input("How many even numbers you want to print: "))
i = 1
while(i<=n):
    print(i*2)
    i+=1

IDLE Shell 3.10.6
File Edit Shell Debug Options Window Help
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.
>>>
10= RESTART: C:/Users/Kheral.aditya/Desktop/Aditya_Main/Python/Assignment/Assignment-8/whileloop.py
How many even numbers you want to print: 10
2
4
6
8
10
12
14
16
18
20
```

7. Write a python script to print first N even natural numbers in reverse order

```
whileloop.py - C:/Users/Kheral.aditya/Desktop/Aditya_Main/Python/Assignment/Assign...
File Edit Format Run Options Window Help
#a python script to print first 10 even natural numbers in reverse order
n = int(input("How many even numbers you want to print: "))
i = 1
j=0
reverse = 2*n
while(i<=n):
    rev = reverse - j
    print(rev)
    print(i)
    j+=2
    i+=1

IDLE Shell 3.10.6
File Edit Shell Debug Options Window Help
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-8/whileloop.py
How many even numbers you want to print: 10
20
18
16
14
12
10
8
6
4
2
```

8. Write a python script to print squares of first N natural numbers

```
whileloop.py - C:/Users/Kheral.aditya/Desktop/Aditya_Main/Python/Assignment/Assign...
File Edit Format Run Options Window Help
#a python script to print squares of first 10 natural numbers
n = int(input("Enter the number:"))
i = 1
while (i<=n):
    square = i**2
    i+=1
    print(square)
    print(i)

IDLE Shell 3.10.6
File Edit Shell Debug Options Window Help
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-8/whileloop.py
Enter the number:10
1
4
9
16
25
36
49
64
81
100
```

9. Write a python script to print cubes of first N natural numbers

```
File Edit Format Run Options Window Help
#a python script to print cubes of first 10 natural numbers
n = int(input("Enter the number:"))
i = 1
while (i<=n):
    square = i**3
    i+=1
    print(square)
    print()

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-8/whileloop.py
Enter the number:10
1
8
27
64
125
216
343
512
729
1000
>>>
```

10. Write a python script to print first 10 multiples of N

```
while loop.py - C:/Users/Kheral.aditya/Desktop/Aditya_Main/Python/Assignment/Assig...
File Edit Format Run Options Window Help
#a python script to print first 10 multiples of N
n = int(input("Enter the Number: "))
i = 1
while i<=n:
    print(i*10)
    print()
    i+=1

IDLE Shell 3.10.6
File Edit Shell Debug Options Window Help
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-9/while loop.py
Enter the Number: 10
10
20
30
40
50
60
70
80
90
100
>>>
```