

# Control Statements

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A decorative graphic in the bottom right corner consisting of a light blue square with a white diagonal line from the top-left to the bottom-right, creating a folded paper effect.

# Control Statements

- *while* Loop
- *for* Loop
- *Break* and *Continue* Statements

# While Loop

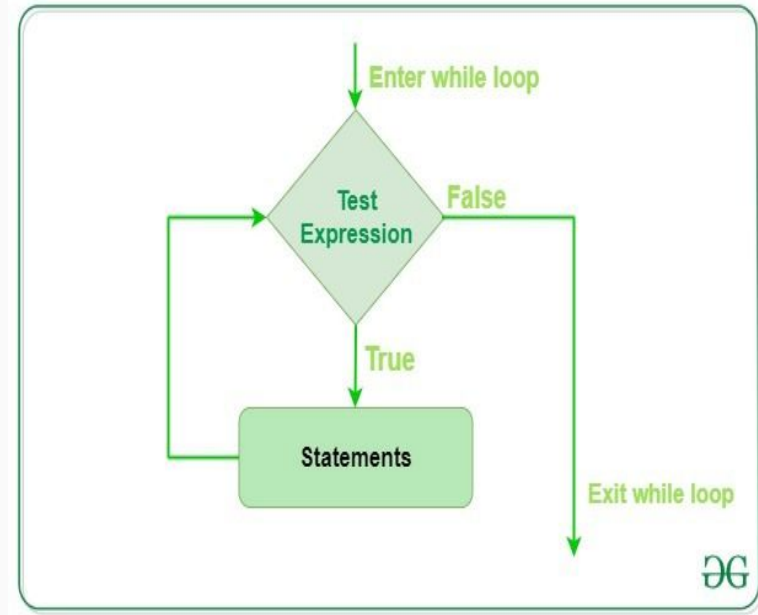
- **While Loops** is used to execute a block of statements repeatedly until a given condition is satisfied.

- **Syntax\_1:**

```
while expression:  
    Statement_1  
    Statement_2
```

- **Syntax\_2:**

```
while condition:  
    Statement block  
else:  
    Statement Block
```



# While Loop - Hands-on!!

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4. Write a program to display the reverse of the entered number using while loop

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4. Write a program to display the reverse of the entered number using while loop
5. WAP to print the sum of the numbers from 1 to 30 (1 and 30 are included) that are divisible by 5 using while loop



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1. Write a program to print the numbers from one to five using while loop
2. WAP to add 10 consecutive numbers starting from 1 using while loop
3. Write a program to find the sum of the digits of a given number using while loop
4. Write a program to display the reverse of the entered number using while loop
5. WAP to print the sum of the numbers from 1 to 30 (1 and 30 are included) that are divisible by 5 using while loop
6. WAP to calculate factorial of a given number using while loop

# Range () Function

- Inbuilt Function
- Syntax:

```
range(begin,end,step)
```

Where,

```
Begin : First number
```

```
End : is last number or a limit
```

```
Step : difference between each number in the sequence
```

- Example:

```
>>>list(range(1,6))
```

```
[1,2,3,4,5]
```

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Ways to display for loop

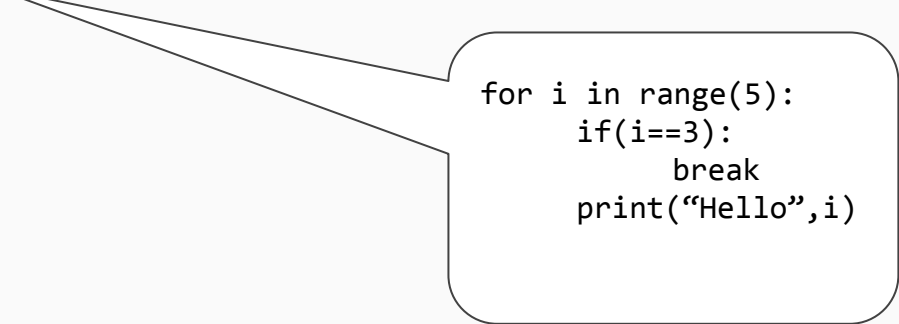
- Range() function
- Reverse printing
- Ways to use for loop

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```
for i in range(5):  
    if(i==3):  
        break  
    print("Hello",i)
```

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```
for i in range(5):  
    if(i==3):  
        continue  
    print("Hello",i)
```

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Examples:

```
1.  0 0 0 0
     1 1 1 1
     2 2 2 2
     3 3 3 3
```

Examples:

```
2.  1
     2 2
     3 3 3
     4 4 4 4

3.  1
     1 2
     1 2 3
     1 2 3 4

4.  1
     2 1
     3 2 1
     4 3 2 1
```

# Homework

1. Write a program to find the square root of a number
2. Write a program to find area of a rectangle
3. Write a program to swap the values of two variables
4. Write a program to convert kilogram into pound
5. Write a program to find whether a number is even or odd
6. Write a program to check the largest among the given three numbers