

Python Fundamental



DASAR-DASAR
PEMROGRAMAN

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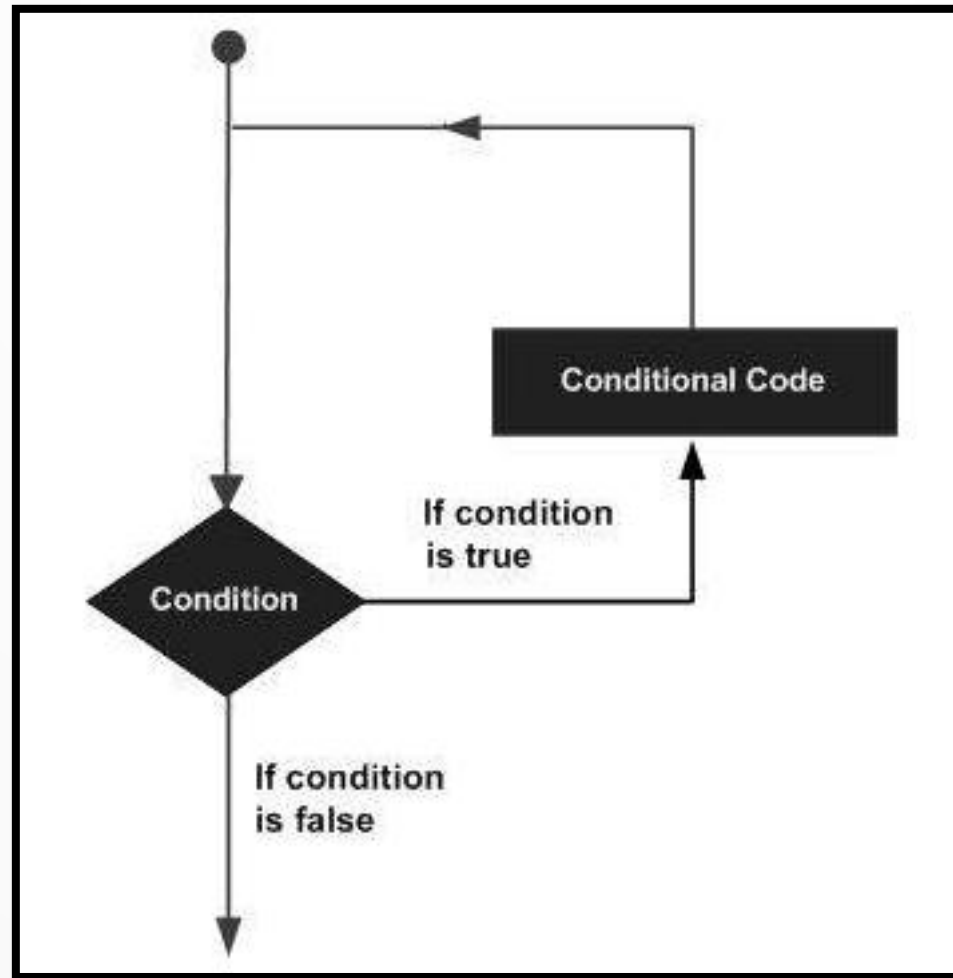
 [nasrultutorial](https://www.youtube.com/nasrultutorial)

Python Fundamental



LOOPING

Looping



Looping For

```
print("-----Cetak Angka 1 sd 5 -----")
angka = 5
for no in range(angka):
    no = no + 1
    print("Angka ",no)
```

Mencetak Looping For

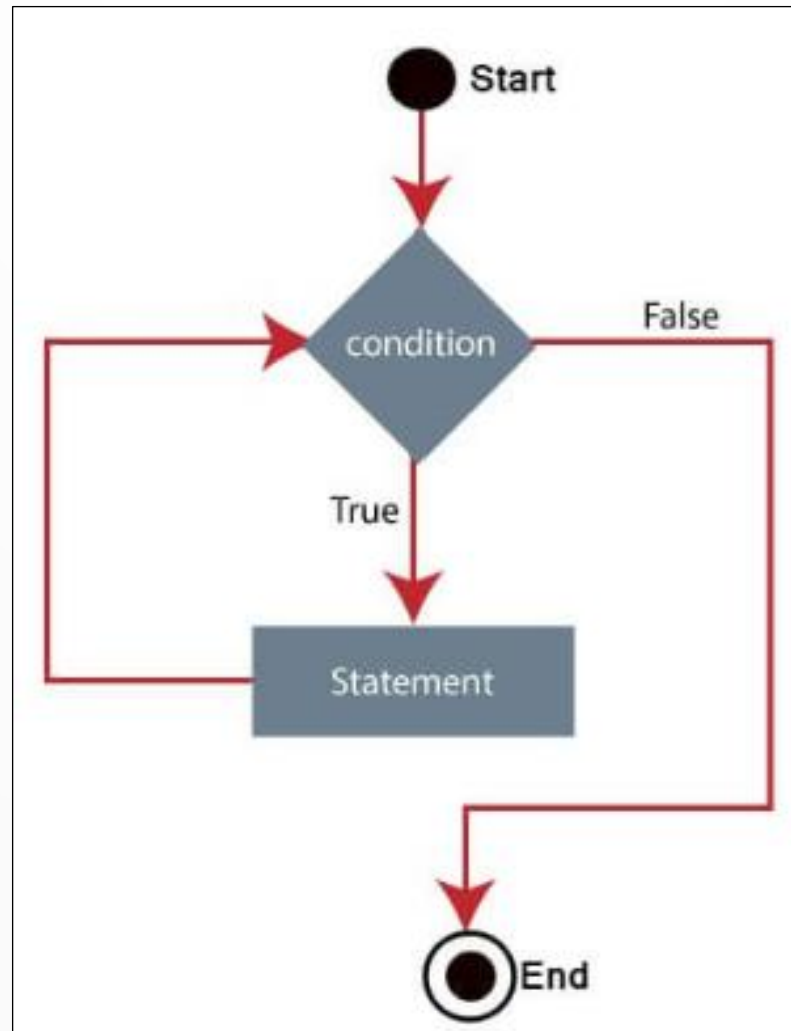
```
PS E:\python> python latihan5_forloop.py
-----Cetak Angka 1 sd 5 -----
Angka 1
Angka 2
Angka 3
Angka 4
Angka 5
```

Latihan Looping For

```
print("-----cetak 1 s/d 20-----")
angka = 20
for no in range(angka):
    no += 1 # no = no + 1
    print("Angka",no)
```

```
print("-----cetak bilangan genap 1 s/d 20-----")
bil = 20
for no in range(bil):
    no += 1 # no = no + 1
    if(no % 2 == 0):
        print("Bilangan Genap",no)
```

Looping While(1)



Looping While(2)

```
print("-----Cetak Bil 10 - 15-----")
bil = 10
while(bil <= 15):
    print("Bilangan ",bil)
    bil += 1 #increment bil = bil + 1
```

Looping While(3)

```
print("-----Cetak No. 55 - 50-----")  
no = 55  
while(no >= 50):  
    print("No.",no)  
    no -= 1 #decrement no = no - 1
```

Looping While(4)

```
#Looping while dgn if & operator modulus (siswa bagi) %
print("-----Bilangan Ganjil-----\n")
bil = 1
while(bil <= 5):
    if(bil % 2 == 1):
        print("Bilangan Ganjil ",bil)
    bil += 1
print("\n-----Bilangan Genap-----\n")
bil = 1
while(bil <= 5):
    if(bil % 2 == 0):
        print("Bilangan genap ",bil)
    bil += 1
```

Mencetak Looping While(1)

```
PS E:\python> python latihan5b_whileloop.py
-----Cetak Bil 10 - 15-----
Bilangan 10
Bilangan 11
Bilangan 12
Bilangan 13
Bilangan 14
Bilangan 15
```

Mencetak Looping While(2)

```
PS E:\python> python latihan5d_loopif.py
-----Bilangan Ganjil-----

Bilangan Ganjil  1
Bilangan Ganjil  3
Bilangan Ganjil  5

-----Bilangan Genap-----

Bilangan genap   2
Bilangan genap   4
```

Nested Loop

Perulangan bersarang adalah sebutan untuk perulangan di dalam perulangan. Konsep seperti ini sering dipakai untuk memecahkan masalah programming yang cukup kompleks. Semua jenis perulangan bisa dibuat dalam bentuk perulangan bersarang, termasuk perulangan FOR dan WHILE.

Latihan1 Nested Loop

```
for i in range(5):  
    for j in range(i+1):  
        print('*', end='')  
    print('')
```

*

* *

* * *

* * * *

* * * * *

Latihan2 Nested Loop

```
string = ""
bar = 1
# Looping Baris
while bar <= 5:
    kol = bar
    # Looping Kolom
    while kol > 0:
        string += "*"
        kol = kol - 1
    string += "\n"
    bar = bar + 1
print (string)
```

*

**

Latihan3 Nested Loop

```
a = 6
for i in range(0, a):
    for j in range(0, a - 1):
        print('*', end='')
    a -= 1
    print('')
```

**

*

Latihan4 Nested Loop

```
a = 5
s = a - 1 # for spaces
for i in range(0, a):
    for j in range(0, s):
        print(' ', end='')
    s -= 1
    for j in range(0, i + 1):
        print('*', end='')
    print('')
```



A 5x5 pyramid of asterisks. The first row has 1 asterisk, the second row has 2, the third row has 3, the fourth row has 4, and the fifth row has 5. The asterisks are aligned to the right, creating a triangular shape.

Referensi

- Nasrul, Modul Python Fundamental, NF Computer 2020
- Henry Saptono, Modul Algoritma Pemrograman PPST, LP3T Nurul Fikri 2010
- <https://tutorialspoint.com/python/>