

18 Dec 2024

if condⁿ:
 statements

No brackets
logic changes based on level

En:

```
if 2 > 3:  
    print("yes")  
print("no")
```

x = 10

y = 0

if y != 0:

 print("yes")
 print(x/y)

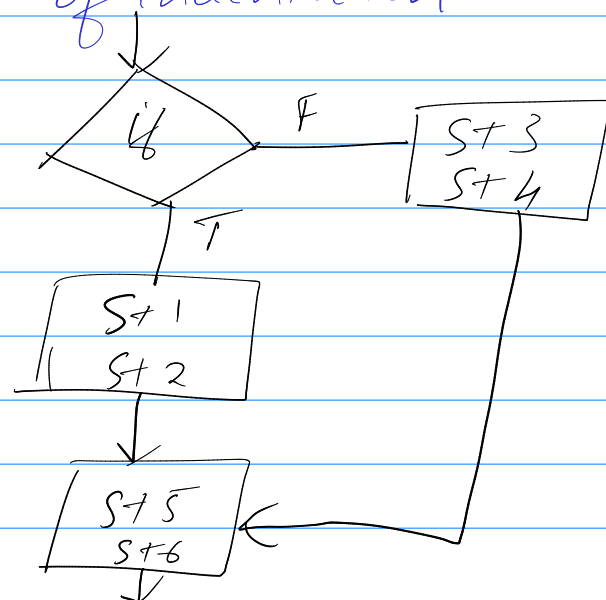
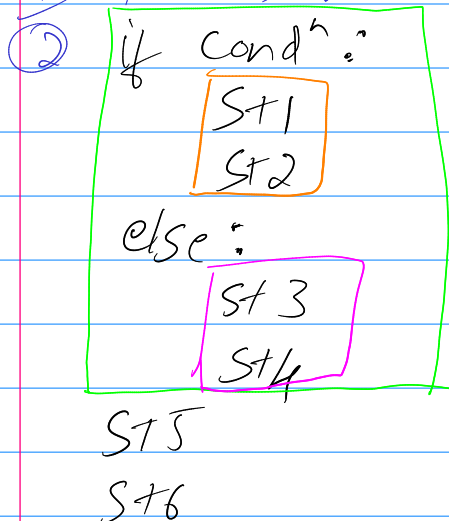
print("y is 0")

* Indentation

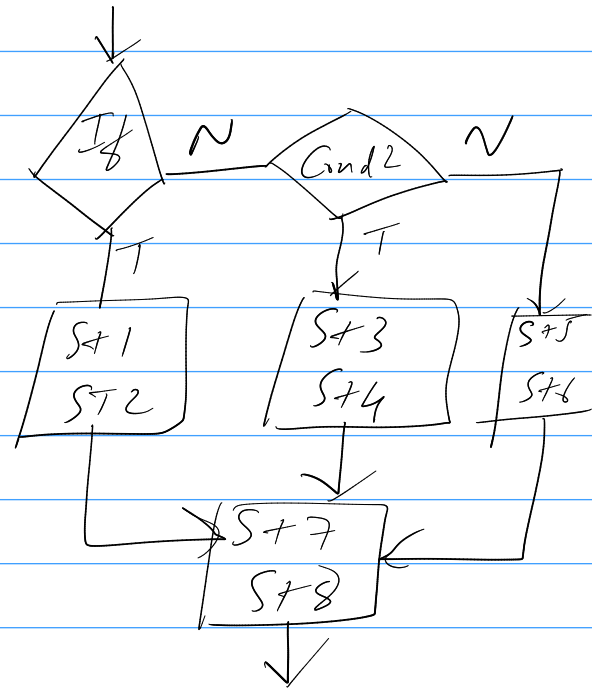
→ Inside If block

→ outside the block

IDE → will take care of indentation



③ if condⁿ1:
 S+1
 S+2
 elif condⁿ2:
 S+3
 S+4
 else:
 S+5
 S+6
 S+7
 S+8



④ if condⁿ1:
 if condⁿ2:
 S+1
 S+2
 else:
 S+3
 S+4
 else:
 S+5
 S+6

Nested If
 * Do Not Nest more than 3 levels (Recommended)

Ternary Operation

Value = true value if condⁿ else false value

Eg:-

age = 18

Status = "ADULT" if age >= 18 else "MINOR"
 print(status) # output: ADULT

Loops

① For loop

```
for i in range(10):  
    print(i)
```

10 → Stop value
(0 to 9)
range(n)
0 to n-1

```
for m in range(i, j):  
    print(m)
```

m → variable
i to j-1

```
for k in range(i, j, S):  
    print(k)
```

k → variable
i, i+S, i+2S...j-S

Can also be used over
String, list, tuple...

m = 'vish'

```
for i in m:  
    print(i)
```

v
i
s
h

range → index

range not used → elements

print function always introduces $\backslash n$ at end
to override behaviour use
print("...", end="")

While loop

```
i = 10
while i > 0:
    print(i)
    i -= 1
```

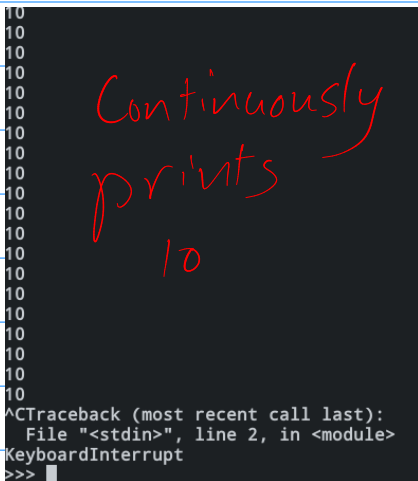
* Three places to observe if initial value is not proper or condⁿ is not proper while will not execute

```
i = 10
while i > 0:
    print(i)
    i -= 1
```

Infinite loop

```
i = 10
while i > 0:
    print(i)
    if (i == 100):
        break
```

- # if no inc or dec is given
- # it will always be > 0 (always)
- # Infinite loop



```
While True:  
    print("Hello")
```

```
while -1:  
    print("Hello")
```

#Prints "Hello " infinite times

```
While 0:  
    print("Hello")
```

#Does not work as 0 is false