

# CS 301 - Lecture 8

→ EXAM 1 ( pseudocode <sup>①</sup> - loops)  
→ P3 - due tomorrow

while loop.

## Review

Conditional execution.

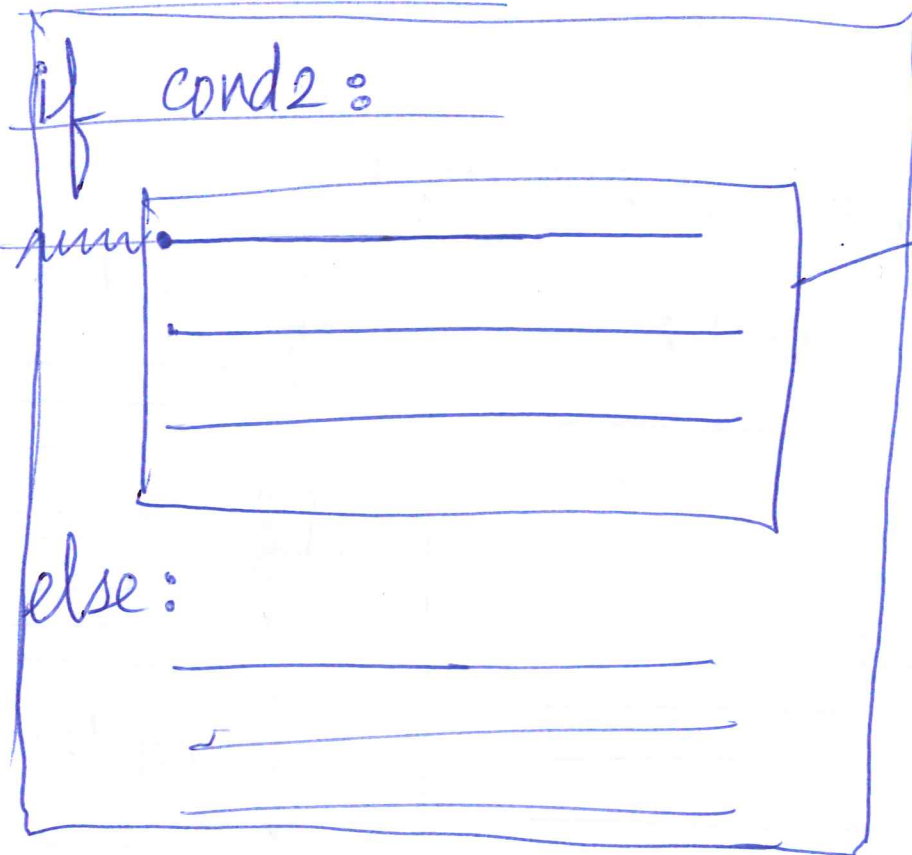
```
if cond1 :  
    _____  
    _____  
    _____  
else :  
    _____  
    _____  
    _____
```

```
if (cond1):  
    _____  
    _____  
    _____  
elif (cond2):  
    _____  
    _____  
    _____  
elif (cond3):  
    _____  
    _____  
    _____  
else:  
    _____  
    _____  
    _____
```

(2)

# Nested if-else

if cond1 :



else :

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

③

if cond1:  
\_\_\_\_\_  
\_\_\_\_\_

cond1, cond2 and cond3  
will be executed/evaluated.

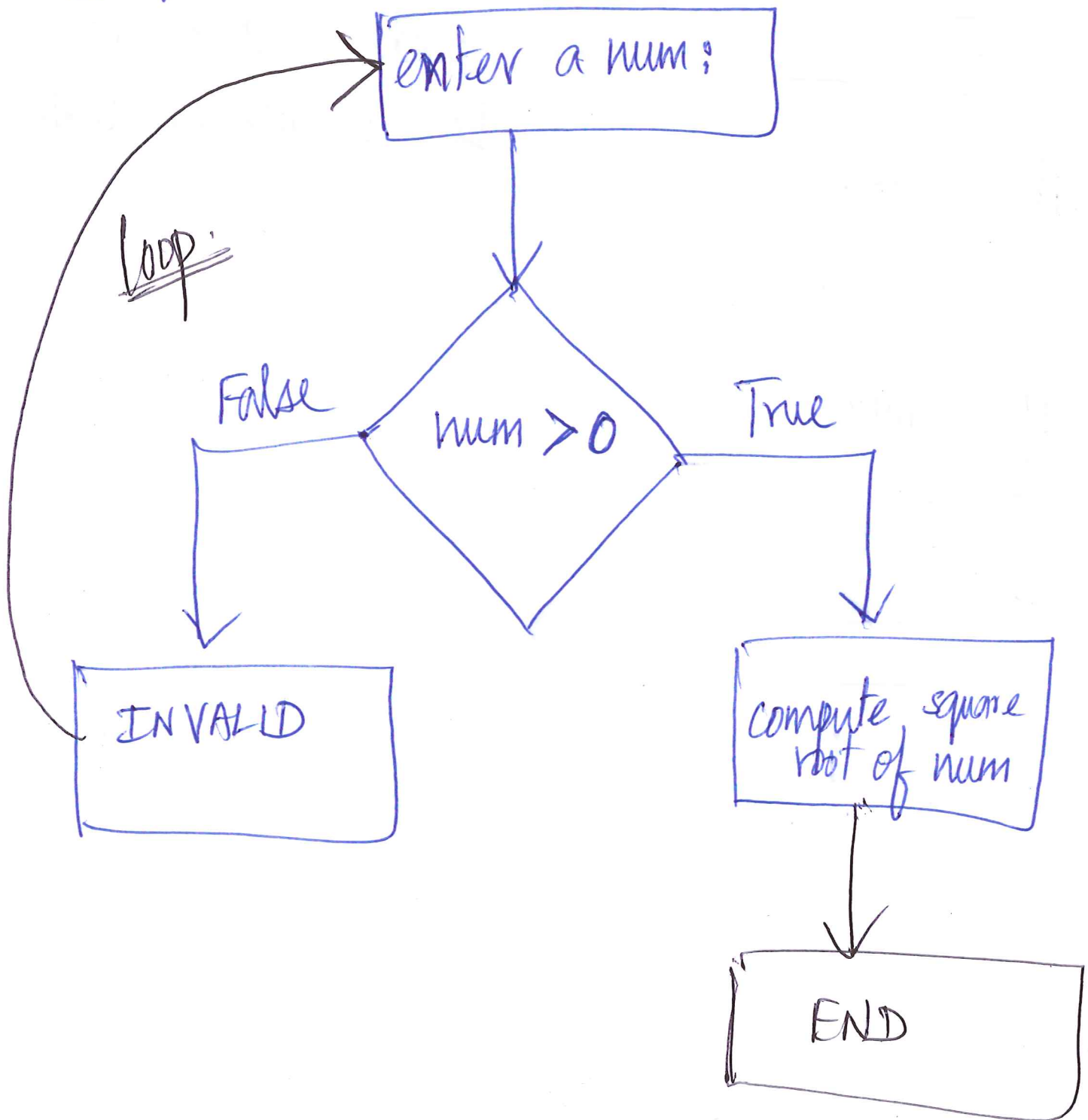
if cond2:  
\_\_\_\_\_  
\_\_\_\_\_

if cond3:  
\_\_\_\_\_  
\_\_\_\_\_

else:  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

# Loops

④



counter

~~1~~ ~~2~~ ~~3~~ 4

5

num

3

$$1 \leq 3 \Rightarrow T$$

$$2 \leq 3 \Rightarrow T$$

$$3 \leq 3 \Rightarrow T$$

$$4 \leq 3 \Rightarrow F$$

O/p:

1

2

3

O/p:

1

counter = 2

⑥

I/p: 5

O/p:  $1 + 2 + 3 + 4 + 5 = 15$

$avg = 15/5 = 3$

I/p: 100

O/p:  $1 + 2 + \dots + 100 = \underline{\quad ? \quad}$

num ~~3~~

~~2~~

~~1~~

0

count  
3

total ~~0~~

~~3~~

~~5~~

6

I/p: 3

O/p: sum = 6

$avg = 6/3 = 2$