

$i = 0$   
 $b = (i < 5)$   
print(b)

$i = i + 1$

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print(b)

print('START')

①

G/P:  
START  
i: 0

$i = 0$

②

i: 1

while  $i < 5$ :

③

i: 2  
i: 3  
i: 4  
END,

print('i:', i)

$i = i + 1$

print('END')

④

$i = 0$  | val(i) is set to 0

$i < 5 \rightarrow \text{value}(i) < 5 \rightarrow 0 < 5 \rightarrow \text{True}$

∴ execute the body.

$\text{print}(i) \rightarrow \text{print}(\text{value}(i)) \rightarrow \text{print}(0)$

$i = i + 1$

RHS:  $i + 1 \rightarrow \text{value}(i) + 1 \rightarrow 0 + 1 \rightarrow 1$

$i = 1 \rightarrow \underline{\text{value } i \text{ is set to } 1}$

Go back to while cond.

$i < 5 \mid \text{value}(i) < 5 \mid i < 5 \mid \text{True}$

∴ execute the body.

$\text{print}(i) \rightarrow \text{print}(\text{value}(i)) \rightarrow \text{print}(1)$

$i = i + 1$

RHS:  $i + 1 \equiv \text{value}(i) + 1 \equiv 1 + 1 \equiv 2$

$i = 2 \quad \underline{\text{value of } i \text{ is set to } 2}$

Go back to while cond

$i < 5 \equiv \text{value}(i) < 5 \equiv 2 < 5 \equiv \text{True}$ .

∴ execute the body.

$\text{print}(i) \equiv \text{print}(\text{value}(i)) \equiv \text{print}(2)$

$i = i + 1$

RHS:  $i + 1 \equiv \text{value}(i) + 1 \equiv 2 + 1 \equiv 3$ .

$i = 3$  set value of  $i$  to 3.

Go back to while condition,

Cond  $\equiv i < 5 \equiv \text{value}(i) < 5 \equiv 3 < 5 \equiv \text{True}$ .

∴ execute the body.

$\text{print}(i) \equiv \text{print}(\text{value}(i)) \equiv \text{print}(3)$

$i = i + 1$

RHS  $\equiv i + 1 \equiv \text{value}(i) + 1 \equiv 3 + 1 \equiv 4$ .

$i = 4 \equiv \text{value of } i \text{ is set to 4.}$

Go back to while condition

Condition:  $i < 5 \equiv \text{value}(i) < 5 \equiv 4 < 5 \equiv \text{True}$ .

∴ execute the body

$\text{print}(i) \equiv \text{print}(\text{value}(i)) \equiv \text{print}(4)$

$i = i + 1$

RHS.  $\equiv i + 1 \equiv \text{value}(i) + 1 \equiv 4 + 1 \equiv 5$

$i = 5 \equiv \text{value } i \text{ is set to 5}$

Go back to while condition,

Condition  $\equiv i < 5 \equiv \text{value}(i) < 5 \equiv 5 < 5 \equiv \text{False}$

∴ Go to the next stmt.

'Anto Gowdy & God lies in the details'

5, 98, 17, 152, 47

9899123482, 98991342180, 989914423,

0x1124FFB49, 0177234C1, 98394421893

① take a variable named max, assign it  
the first number in the list.

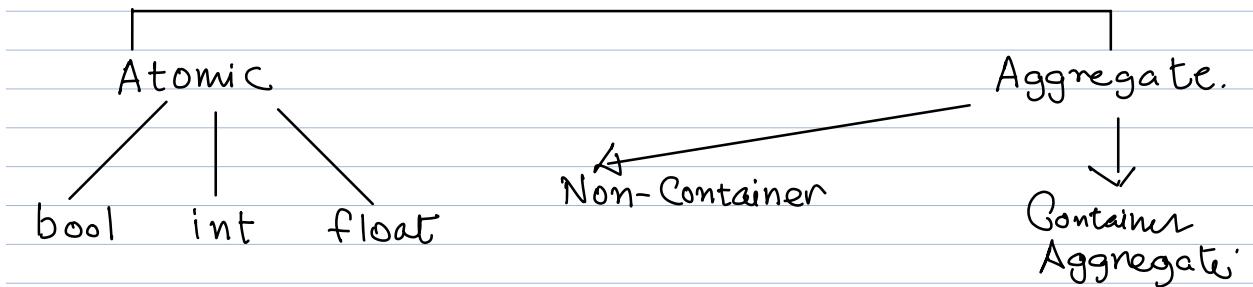
② for each of the following number in list

Compare current number with max

if greater then update max

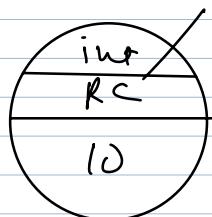
with the current number.

## Data Types



Atomic = Indivisible into more basic parts.

Atom



## Atomic X Aggregate



indivisible,  
fundamental,  
elemental.  
not made up  
of more  
basic parts



Something which is made  
by combining more fundamental  
level entities.