

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

```
i = i + 1
```

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print(b)
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i = i + 1
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```
i = i + 1
b = (i < 5)
print(b)
```

```
print('START')
```

```
i = 0
```

```
while i < 5:
    print('i:', i)
    i = i + 1
```

```
print('END')
```

①

②

③

④

O/P.  
START.  
i: 0  
i: 1  
i: 2  
i: 3  
i: 4  
END,

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

$i = 1 \rightarrow$  value i is set to 1

---

Go back to while cond.

$i < 5$  |  $\text{value}(i) < 5$  |  $1 < 5$  | True

∴ execute the body.

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

$i = i + 1$

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

$i = 2$  | value of (i) 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  $\equiv i < 5 \equiv \text{value}(i) < 5 \equiv 3 < 5 \equiv \text{True}$ .

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

$\therefore$  execute the body

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

$i = i + 1$

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

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

---

Go back to while condition.

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

$\therefore$  Go to the next stmt.

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Anto Gowdy  $\equiv$  God lies in the details.

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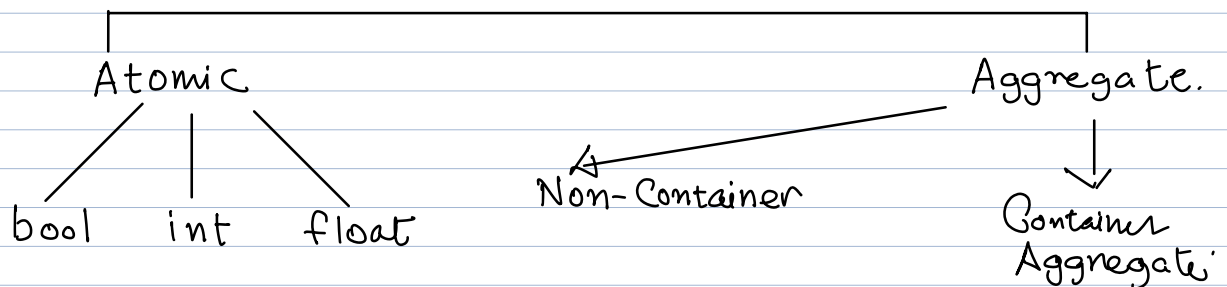
5, 98, 17, 152, 47

9899123482, 98991342180, 989914423,  
0x1124FFB49, 0017723461, 98994421898

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

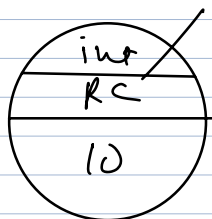
② for each of the following number in list  
compare current number with max  
if greater then update max  
with the current number.

## Data Types



Atomic = Indivisible into more basic parts.

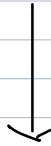
Atom



Atomic X Aggregate



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



Something which is made  
by combining more fundamental  
level entities.