

"Hello Everyone!"

Tuples and Sets

Tuples :

→ unmodifiable lists

immutable

Use-Case :-

~~NASA~~

ISRO = ["Mercury", "Venus",
"Earth", ...]

↓
isro[2]

isro[2] = "AJ's Planet"

Tuples

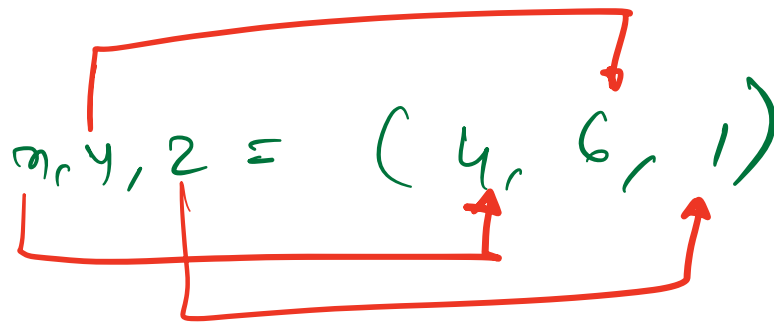
$a = [1, 5, 7]$



$a = (1, 5, 7)$



~~Circular
bores~~



* unpacking

② Sets

↙ ↘
[] "AJ" → set is a unique
collection of elements

()

{

}

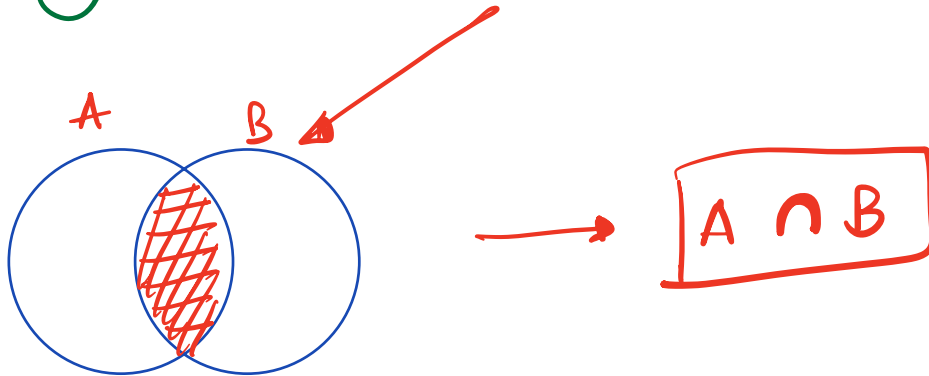
Dict → { }

→ set can store

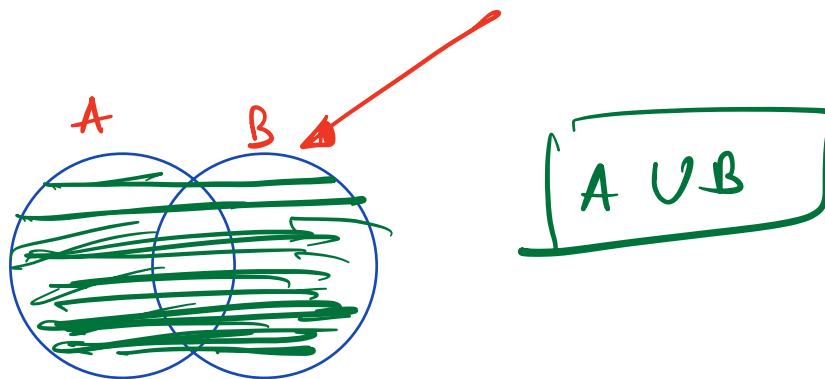
Ⓢ : Sets are NOT
ordered in Python.

Venn Diagram \rightarrow Set operations

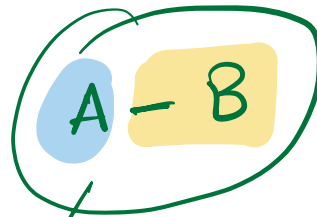
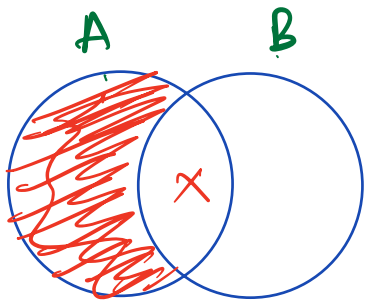
① Intersection (\cap)



② Union (\cup)



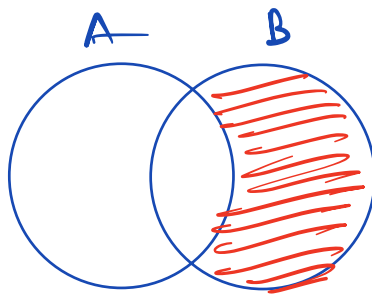
③ Set Difference



all the elements
that are in A But
NOT in B

$$A - B = \underline{A - (A \cap B)}$$

$B - A$ \longrightarrow in B But NOT in A



$$A = \{1, 2\}$$

$$B = \{3, 5, 2\}$$

X X

?

$$A - B \neq B - A$$

$$A - B \rightarrow \underline{\{1\}}$$

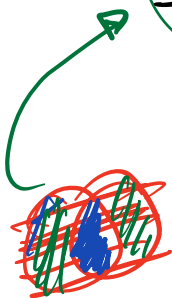
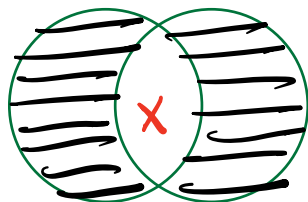
$$B - A \Rightarrow \underline{\{3, 5\}}$$

$$A - B \neq B - A$$

⑤ Symmetric Difference

$A \Delta B \rightarrow$ All elems in Union
But not in Common

$$\Rightarrow (A - B) \cup (B - A)$$



$$\underline{A \cup B} - \underline{A \cap B}$$