- when you need an unchangeable collection of items.
- To store unique, hashable values securely.
- Frozen sets are immutable versions of sets.

Output :
```
# Student 1:
    name : Alice
    age :    22

# Student 2 :
    name :    Bob
    age : 21

# Student 3:
    name : Charlie
    age : 23
```

Day 11

16/07/2025

*. what is set in python?
- unordered collection of unique elements.
- It does not allow duplicate values
- mutable (modifiable)
- Sets do not maintain order like list /

tuples :

Key features :
- unordered
- unique
- mutable
- Set operations.

Access set items!
ex :
    my_set = {1, 2, 3, 4, 5}

Print (my_set) = {1, 2, 3, 4, 5}

Access set Items:
- Since unordered, you cannot access elements.
- you can check if an element exists in a set.

Add set items:
- add() - add elements
- update() - multiple elements.

Remove set items:
- remove() - raises an error. if the item is not found.
- discard() - does not raises an error, if the item is missing.

Fruits = {"apple", "banana" , "cherry"}

Fruits. remove ("banana")

output : {"apple", "cherry"}

fruits. discard ("grape")

\# No error, if "grape" is not found,

- To remove all elements, use clear()
- To delete the set completely, use del.

fruits. clear ()   \# empty set del

fruits. \# delets the set

Join Sets:

- Join two sets by union(), update()

new set.

```
set 1. union (Set 2)
```

Print (new set)

output : {1, 2, 3, 4, 5}

update modifies set 1

```
Set 1. update (Set 2) Print (Set 1)
```

output : {1, 2, 3, 4, 5}

Other set operations:

- Intersection (&) - Common elements
- Difference (-) - elements in set 1 but not in set 2.
- Symmetric Difference (^) - elements in either set, but not both.

loop sets:

Sets are iterable, you can loop through them using a for loop.

frozen sets:

immutable set, you cannot add (or) remove elements after creating it.

Ex: frozen_set = frozenset (["apple", "banana", "cherry"])

. print (frozen-set) #output :

output frozen set ({"apple", "banana", "cherry"})

- when you need an unchangeable collection of items
- To store unique, hashable values securely.
- frozen sets are immutable versions of sets.

update()

ents
set 1 but
in set 2.
in either
not both.

loop through them

add (or) remove

, "bananas", "cherry")

banana", "cherry")