* li = [10, 20, [30, 40], 50, 60]
  0 1 2 3 4

li[2] o/p [30, 40]

li[2][1] → 40 li[2][1] = 100

li = [10, 20, [30, 100], 50, 60]

* tup = (1, 2, 3, 4, (10, 20), 5, 6)
  0 1 2 3 4 5 6

Indexing / slicing ✓

③ Operation : + (concat)

tup1 = (10, 20, 30)

tup1 + (40) ✗

tup2 = tup1 + (40,) ✓

tup1 = tup1 + (40, 0)

Note: li = list(range(10, 15)) ✓

↳ [10, 11, 12, --- 14]

③ Set

① Create { } set()

e.g. s1 = {1, 2, 3, 4}

s2 = set([1, 2, 3])

s3 = set(range(5))

↳ {0, 1, 2, 3, 4}

② Accessing → variable_name

③ Operations
- add → add()
- delete → remove()
- union(), intersection(), difference()
  - union: both
  - intersection: common
  - difference: remaining ele of first set

```
s1 = {1, 2, 3, 4}

s1.add(10)
   → {1, 2, 3, 4, 10}

s1.remove(4)
   → {1, 2, 3, 10}
```

④ Dictionary

① Create

```
di = {'Name': 'Uwaish', 'Age': 28}
```

```
di = {'Key1': Collection, 'Key2': Coll}
```

ex:

```
di = {'ID': [101, 102, 103],
      'Name': ['Uwaish', 'Qadir', 'Pasha']}
```

dict of list

② Access
- identifier
- identifier['key']

Key: Unmutable, values: mutable

③ Operation
- Modify → access & assign
- Add → dict_name['key'] = value
- Delete → .pop('key')

```
di = {'Name': 'Unnaish', 'Age': 29}

di['gender'] = 'Male'

print(di) ~> {'Name': 'Unnaish',
              'Age': 29,
              'gender': 'Male'}
```