

Assignment 4 - Python (List, Tuple, Set & Dictionary)

SET A

List

1. Sum of list items

```
numbers = [1,2,3,4,5]
```

```
print(sum(numbers))
```

2. Multiply list items

```
result = 1
```

```
for n in [1,2,3,4]: result *= n
```

```
print(result)
```

3. Sort tuples by last element

```
tuples = [(2,5),(1,2),(4,1),(3,4)]
```

```
print(sorted(tuples, key=lambda x: x[-1]))
```

Tuples

Create tuple: `my_tuple = (1,2,3)`

Different data types: `(1,"Python",3.14)`

Check element: `20 in (10,20,30)`

Sets

Create set: `{1,2,3}`

Iterate set using for loop

Set difference: `{1,2,3,4} - {3,4}`

Dictionary

Sort dictionary by value

Add key to dictionary

Iterate dictionary using for loop

SET B

List

Remove duplicates from list

Check if list is empty

Tuples

Convert list to tuple

Remove item from tuple

Slice a tuple

Find length of tuple

Sets

Check subset

Find max & min in set

Find length of set

Dictionary

Generate dictionary `(x, x*x)`

Merge two dictionaries

Get dictionary from object fields