

Task 3

Python Data Types

1- Numeric types:

- Integers (int):
Whole numbers, ex: 1, 2, 3
- Float (float):
Numbers with decimals, ex: 1.5, 2.5, 1.3
- Complex (complex):
Numbers with a real and imaginary part, ex: 3 + 4 j

2- Sequence Types:

- String (str):
Text data that is enclosed in quotes ex: "apple", "banana".
- List (list):
An ordered mutable collection of items, enclosed in square brackets, ex: [1, 3] or ["apple", "banana"].
- Tuple (tuple):
An ordered immutable collection of items included in parentheses, ex: (1, 2, 3) or (apple, banana).
- Range (range):
Represents an immutable sequence of numbers commonly used in loops, ex: range(5) which generates numbers from zero to four.

3- Mapping type:

- Dictionary (dict):
An unordered mutable collection of key-value pairs, enclosed in curly braces, ex: {"name": "Alice", "age": 25}.

4- Set types:

- Set (set):
Add an ordered mutable collection of unique items, ex: {1, 2, 3}.
- Frozen Set (frozen set):
An immutable version of set.

5- Boolean type:

- Boolean (bool):
Represents 2 values, ex, True or False

6- None type:

- None represents the absence of a value and is used as a placeholder.