**Basic data types in Python:**

1. **What are the basic data types in Python?**

* The basic data types in Python are:
  + Integer represents whole numbers.
  + Float: represents decimal numbers.
  + String: represents a sequence of characters.
  + Boolean: represents either True or False.
  + List: represents an ordered collection of elements.

1. **How do you convert a string to an integer in Python?**

* You can use the *int()* function to convert a string to an integer.
  + For example:
    - num = 10
    - num\_int = *int*(num\_str)

1. **How do you check the data type of a variable in Python?**

* You can use the ‘type()’ function to check the data type of a variable.
  + For example:
    - num = 10
    - print(type(num))
    - # Output: <class ‘*int’*>

1. **What is the difference between a list and a tuple in Python?**

* A list is mutable, which means you can modify its elements, while a tuple is immutable, meaning its elements cannot be changed after creation.

1. **How do you create an empty dictionary in Python?**

* You can create an empty dictionary using either the curly braces {} or the dict() function.
  + For example:
    - empty\_dict = {}
    - empty\_dict = *dict* ()