1.Understanding data types: integers, floats, strings, lists, tuples, dictionaries, sets.

Ans:

1). Integers: integers is the the number of values and classification by the values method (type) are used in int and number

Ex:

x = 1

y = 35656222554887711

z = -3255522

print(type(x))

print(type(y))

print(type(z))

2).Floats: The floats number are represent the point values are is the data types.

Ex :

x = 1.10

y = 1.0

z = -35.59

print(type(x))

print(type(y))

print(type(z))

3). String : Strings in python are surrounded by either single quotation marks, or double quotation marks.

'hello' is the same as "hello".

print("Hello")

print('Hello')

4).List : Lists are used to store multiple items in a single variable.

Lists are one of 4 built-in data types in Python used to store collections of data, the other 3 are [Tuple](https://www.w3schools.com/python/python_tuples.asp), [Set](https://www.w3schools.com/python/python_sets.asp), and [Dictionary](https://www.w3schools.com/python/python_dictionaries.asp), all with different qualities and usage.

Ex thislist = ["apple", "banana", "cherry"]

print(thislist)

* List Length

To determine how many items a list has, use the len() function:

Ex thislist = ["apple", "banana", "cherry"]

print(len(thislist))

## type()

From Python's perspective, lists are defined as objects with the data type 'list':

Ex mylist = ["apple", "banana", "cherry"]

print(type(mylist))

## 5). Tuple

Tuples are used to store multiple items in a single variable.Tuple is one of 4 built-in data types in Python used to store collections of data, the other 3 are [List](https://www.w3schools.com/python/python_lists.asp), [Set](https://www.w3schools.com/python/python_sets.asp), and [Dictionary](https://www.w3schools.com/python/python_dictionaries.asp), all with different qualities and usage.A tuple is a collection which is ordered and **unchangeable**.Tuples are written with round brackets.

Ex thistuple = ("apple", "banana", "cherry")

print(thistuple)

\*Tuple len():To determine how many items a tuple has, use the len() function:

Ex thistuple = tuple(("apple", "banana", "cherry"))

print(len(thistuple))