Python for Machine Learning and Data Science

DATA TYPES

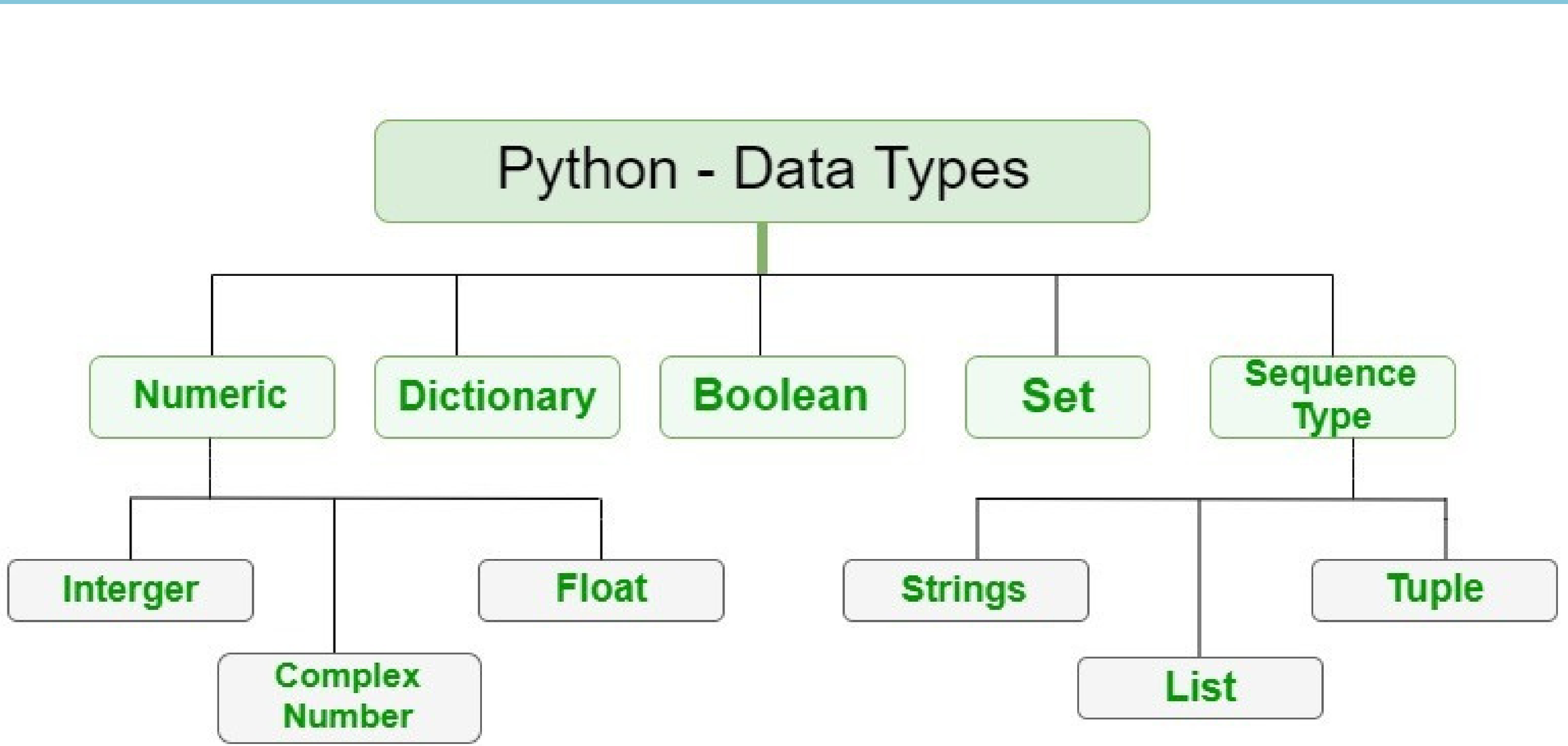
MYTHRI SHIVAKUMAR

Welcome back!

I HOPE YOU ALL HAVE SUCCESSFULLY INSTALLED PYTHON AND THE IDE'S. TODAY LET US COVER SOME MORE TOPICS! IT IS TIME TO LEARN AND GROW AGAIN!

OUTCOMES

- Learn about different data types.
- Learn how to receive input from the user.
- Implement Type Conversion.
- Learn about formatted strings.


Python - Data Types
Numeric
Dictionary
Boolean
Set
Sequence Type
Interger
Complex Number
Float
Strings
List
Tuple

NUMERIC DATA TYPE

INTEGER

x = 1

y = 35656222554887711

z = -3255522

COMPLEX

x = 3+5j

y = 5j

z = -5j

FLOAT

x = 1.10

y = 1.0

z = 12E4

SEQUENCE DATA TYPES

STRINGS

```
a = "Hello, World!"
b = "EpsilonPi Club"
c = "Python boot camp"
```

TUPLE

```
tuple1 = ("apple", "banana", "cherry")
tuple2 = (1, 5, 7, 9, 3)
tuple3 = (True, False, False)
```

LIST

```
list1 = ["apple", "banana", "cherry"]
list2 = [1, 5, 7, 9, 3]
list3 = [True, False]
```

DATA TYPES

DICTIONARY

```
teams = {
"Niharika" : "Team Alpha",
 "Rahul" : "Team Delta",
  "Akhil" : "Team Bravo"
}
```

BOOLEAN

True

False

SET

```
thisset = {"apple", "banana", "cherry"}
set2 = {1, 5, 7, 9, 3}
set3 = {True, False, False}
```

print()

in-built function.

```
a = 5
print('The value of a is', a)
```

input()

in-built function.

```
num = input('Enter a number: ')
x = input("write anything after this: ")
```

Type Conversion

- WHY IS IT NECESSARY?
- HOW DO WE IMPLEMENT IT?
- SYNTAX:-

  required_data_type(variable)

FORMATTED STRINGS

DYNAMICALLY GENERATE TEXTS WIYH SOME VARIABLES USING FORMAT FUNCTION

```
x = 5
y = 10
print('The value of x is {} and y is {}'.format(x,y))
print(f'The value of x is {x} and y is {y}')
```