

- We use variables to store data in computer's memory
- Variable is a label to a specific memory location and the data stored there
- Variable is just like a Package Box- You can put your luggage inside and can display name tags- same is the concept of variables
- Variable references to specific memory location
- Primitive types are the basic building blocks
- Primitive types are the basic data types offered by programming languages
- In python, primitive data types are
  - 1- Numbers
  - 2- Strings
  - 3- Booleans
- Numbers can be:
  - 1- Integers
  - 2- Floats
- While working with strings/text we need to surround text with double/triple quotes
- Booleans are YES/NO – True/False (English Language analogy)
- Booleans are used to make decisions
- Python is a case sensitive language- False != false
- Variable names should be descriptive and meaningful rather mystical, it will lead to a more maintainable code
- When Dealing with coordinates you can use mystical characters like x,y,z that's and exception
- Always use lower cased variable names
- Use underscores to separate variable names, it's easy to read
- Always use spaces while variable declaration – course = 5
- Normally we use triple quotes for a long message like body of an email
- In Python the strings are Zero 0-Indexed
- We use len function to find the length of a string/number of characters in string

- We use brackets notation to access any character & Slicing strings
- # Escape Sequences
- # \\
- # \'
- # \"
- # \n
- A comment is an additional note which is not executed by the python interpreter- denoted as #
- String concatenation is replaced by Formatted Strings
- Formatted String is actually an expression that is evaluated at run-time
- We can put any valid expression in curly braces of formatted strings as it's an expression to be evaluated at run-time

```
full_name = f"{first_name} {last_name}"
```

- In python we call functions as methods
- It's an OOP term, everything in Python is an object and has a function called as methods which we can access using the dot notation
- A module is a separate python file including some code
- Two objects of same type can be concatenated
- Falsy values in Python
- "" Empty String
- 0 Zero
- None