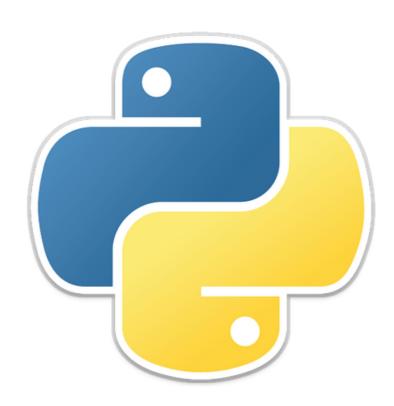


## DATA SCIENCE COURSE



## Python Basics Assignment

Week - 1



#### Python Basics Programs

- 1. Print Hello world!
- 2. Declare the following Variables: int,float,Boolean,strings And print its value
- 3. Program to Calculate the Area of a Triangle
- 4. Program to Swap Two Variables.
- 5. Program to check if a Number is Positive, Negative or 0.
- 6. Program to check if a Number is odd or even.
- 7. Program to Print Odd Numbers Within a Given Range.
- 8. Program to Find the Factorial of a Number.
- 9. Program to Reverse a Given Number.
- 10. Program to Find the Sum of Natural Numbers.



### Strings

- \*\*\* Practice Python built in methods .Refer below link: https://www.programiz.com/python-programming/methods/string
- 1. Python Program to reverse a string
- 2. Program to check if string is palindrome
- 3. Program to replace all occurance of "a" with "&" in a string.
- 4. Program to count the number of vowels in a string
- 5. Input two string and display the larger string without using builtin function
- 6. Count the number of digits and letter in a string
- 7. Count the number of lowercase character in a string
- 8. Python program to check if a substring is present in a given string
- 9. Practice String slicing:
  Input string "google" .Use string slicing to print
  following output
  'goo', 'elg', 'lgo', 'ogl'



### Strings

10. Input a dtring "hello". Access the third element 'l". Change 'l' to 'p' in the string.

# Lists And Tuples

- 1. Python Program to Find the Largest Number in a List
- 2. Python Program to Put Even and Odd elements in a List into Two Different Lists
- 3. Python Program to Read a List of Words and Return the Length of the Longest One
- 4. Python Program to Create a List of Tuples with the First Element as the Number and Second Element as the Square of the Number
- 5. Python Program to Remove the Duplicate Items from a List.
- 6. Python Program to Read a List of Words and Return the Length of the Longest One

#### **Dictionaries**

- 1. Python Program to Check if a Given Key Exists in a Dictionary or Not
- 2. Python Program to Remove the Given Key from a Dictionary
- 3. Python Program to Sum All the Items in a Dictionary
- 4. Write a Python program to iterate over dictionaries using for loops
- 5. Write a Python program to remove a key from a dictionary
- 6. Write a Python program to sort a dictionary by key.