**ASSIGNMENT-1**

**Q-1** Distinguish between variables, constant and literals with example

**VARIABLE-** A variable is like a box with a name in which you can store a value . A python variable is a reserved memory location to store values. In other words, a variable in python program gives data to the computer for processing. Every value in python has a data type. Variables can be declared by any name or even alphabets like a, aa,abc etc.

For example

X=5

Y= “John “# here x and y ate the variable

Print(x)

Print (y)

**CONSTANT-** A constant is a type of variable whose value cannot be changed. They are usually declared in a module where a module is a file that can contain variables, functions etc. Which is imported to the main file.

Example

# In a file constant.py define following constants

PI=3.14

GRAVITY =9.8

# In another file main.py import the constant and use

Import constant

Print ( constant.PI)

Print ( constant. GRAVITY)

**LITERALS-**  The data that is provided in the variable are known as literals in python. Python supports the following literals-

1 string literals

2 Numeric laterals

3 Boolean laterals

4 Literals collections such as List, Tuples, Dictionary

5 None Literals

Example

# single Line strings

name = “John Doe"

Friends = “Ricky Ponting “

##multipline string by black slash at the end of each line

Hello= “Hello"/

“World"

**Q.2** Define identifiers and Data type

**IDENTIFIERS-**  A python identifier is a name used to identify a variable, function, class , module or other object. An identifiers starts with a letter A to Z or a to z or an underscore(\_).

**DATA TYPE-** Data types are the classification or categorization of data items. Data types represent a kind of value which determines what operations can be performed on that data. Numeric, non-numeric and Boolean ( true/false) data are the most used data type