DAILY ASSESSMENT

Date:	**20/05/2020**	**Name:**	**Mahima Shetty**
Course:	PYTHON	**USN:**	**4AL15EC050**
Topic:	Variables, integer strings and float , List types, ranges	**Semester & Section:**	**8 A**
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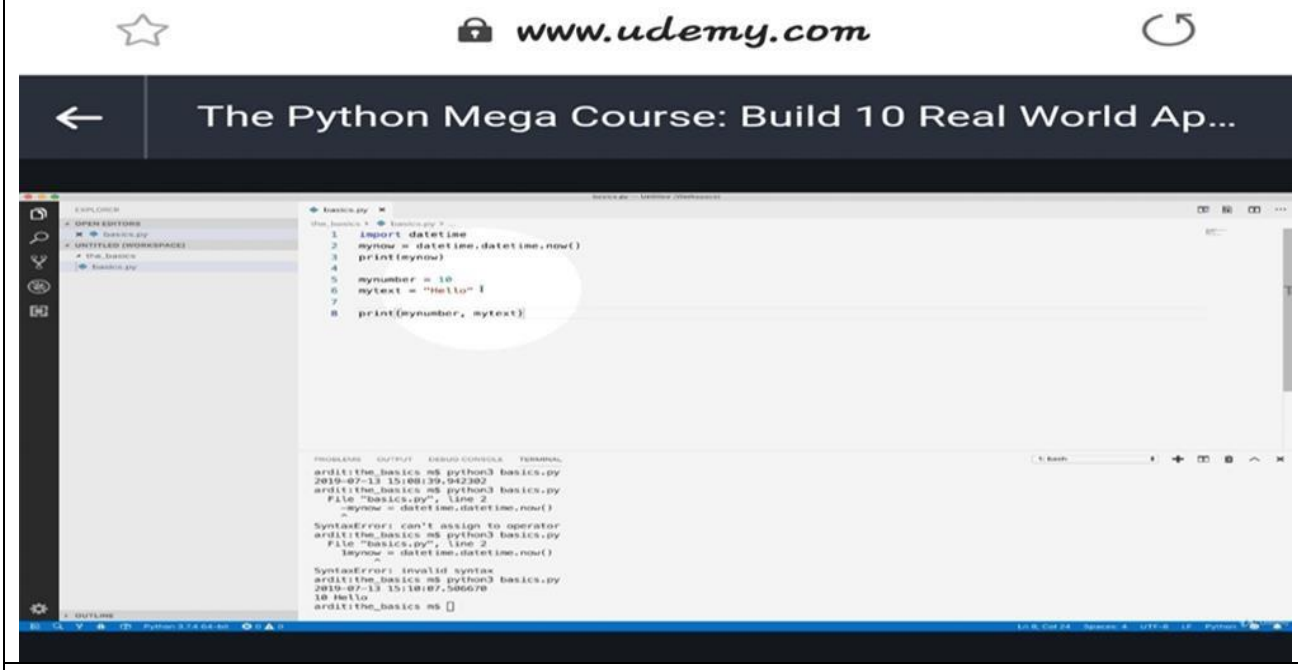
AFTERNOON SESSION DETAILS

Image of session



Report:-

Variables

Creating Variables

- Variables are containers for storing data values.
- Unlike other programming languages, Python has no command for declaring a variable.

A variable is created the moment you first assign a value to it

❖ **Variable Names**

- A variable can have a short name (like x and y) or a more descriptive name (age, car name, total volume). Rules for Python variables:
- A variable name must start with a letter or the underscore character
- A variable name cannot start with a number
- A variable name can only contain alpha-numeric characters and underscores (A- z, 0-9, and _)
- Variable names are case-sensitive (age, Age and AGE are three different variables)

❖ Global Variables

Variables that are created outside of a function (as in all of the examples above) are known as global variables. Global variables can be used by everyone, both inside of functions and outside.

The global Keyword

Normally, when you create a variable inside a function, that variable is local, and can only be used inside that function.

To create a global variable inside a function, you can use the global keyword.

CREATE INTEGER, STRINGS AND FLOAT

Integer

We already know the following operators which may be applied to

numbers: +, -, * and **. The division operator / for integers gives a floating-point real number (an object of type float). The exponentiation ** also returns a float when the power is negative.

❖ Floating numbers

When we read an integer value, we read a line with input() and then cast a string to integer using int(). When we read a floating-point number, we need to cast the string

to float using float().Floats may also be in scientific notation, with E or e indicating the power of 10 (2.5e2 = 2.5 x 102 = 250).

❖ String lists

Python is often used to process textual data. With strings, and string lists, we store and can handle this data in an efficient way.

❖ List types

There are four collection data types in the Python programming language:

- List is a collection which is ordered and changeable. Allows duplicate members.
- Tuple is a collection which is ordered and unchangeable. Allows duplicate members.
- Set is a collection which is unordered and unindexed. No duplicate members.
- Dictionary is a collection which is unordered, changeable and indexed. No duplicate members.
- When choosing a collection type, it is useful to understand the properties of that type. Choosing the right type for a particular data set could mean retention of meaning, and, it could mean an increase in efficiency or security.

❖ Ranges

The range() function returns a sequence of numbers, starting from 0 by default, and increments by 1 (by default), and stops before a specified number.

Syntax :

range(start, stop, step)

❖ Parameter Values

- start Optional: An integer number specifying at which position to start.

Default is 0

- stop Required: An integer number specifying at which position to stop (not included).

step Optional: An integer number specifying the incrimination. Default is 1