Assignment\_1(python module)

Ans\_1—AS we know

Values – these can be integers or strings, therefore ‘hello’, -87.8 and 6 are values

Expressions—these are mathematical statements containing at least one number or variable or both and which are linked by a mathematical operator, therefore (\*, -, +, /) comes inside expression

Ans\_2— A string is a value which represents text and is one of data type and cannot hold anything inside it, but variable is something which can hold anything inside it which may be string, integer, list, tuple etc.

Ans\_3—three different data types are

1. Numbers- it contains integers, floating numbers and complex numbers which are used in various expressions during coding depending upon requirement

Ex- 88, 88.9 and 2+2j

1. String- it is also a data type which is nothing but a collection of characters in sequence, strings are values given inside single, double quotes

Ex- ‘sachin’ is a string

1. List- it is also a data type which contains different elements having different data types like string, integer, list inside list, tuple inside list etc.

Ans\_4—expressions are made up of values, containers/variables and mathematical operators, expressions are either used for evaluating the values of unknowns or showing the results

Ex- a= 10+20, contains integers as values, + as mathematical operator and ‘a’ as container or variable for storing the output

Ans\_5-- statement is just a collection of words which is used for giving some sort of information about any operation or expression and is written inside triple quote

Ex- ‘’’ this is assignment no. 1’’’

Expression—it is a mathematical expression containing values, variables and operators, which gives some output as result

Ex- like spam=10, in this expression ‘like spam’ is a container/variable, = is a mathematical operator and 10 is a value which is integer

Ans\_6—variable bacon will always contain value as 22, until any new value is assigned to it and the operation

Bacon+1, will give 23 as result which will be saved inside new space in main memory not inside the space in memory in which variable bacon is saved with value as 22

Ans\_7—both will give same result as output and the datatype of both the result will also be same as ‘str’

Ans\_8—we can’t make variable with integer name containing only integers because it is not supported by python, but if we attach any string type character or word before integer than it can used as variable like

Ex- a100, b100, sachin100 etc.

Ans\_9—for getting integer, floating no, string of any value we can use

Int (), float () and str () respectively

Ex- int (10) will give 10 as answer which is integer

float (10) will give 10.0 as answer which is float

str (10) will give ‘10’ as result which is string

Ans\_10-- 'I have eaten ' + 99 + ' burritos.' Will give error because first and last are strings but middle one is integer and this operation is not supported due to different data types and string to string concatenation is valid not this, but we can make it work if we convert 99 from integer to string like

Ex- 'I have eaten ' + str (99) + ' burritos.'