**Assignment No.-1**

Q.1. In the below elements which of them are values or an expression? eg:- values can be integer or string and expressions will be mathematical operators.

Ans1.> \* = Value(Mathematical operator)

'hello' = Value (String)

- 87.8 = Value (Value with operator)

- = Value (Mathematical operator)

/ = Value (Mathematical operator)

+ = Value (mathematical operator)

6 = Value

Q.2. What is the difference between string and variable?

Ans2.> String -> String is a value representing text

Variable-> Variable is a name that can refer to any value

Q.3. Describe three different data types.

Ans3.> Data Type in Python

|  |  |
| --- | --- |
| Text type | Str |
| Numeric type | Int,float,complex |
| Boolean type | Bool |
| Sequence type | list,range |
| Mapping type | dict |
| Set type | Set |
| Binary type | Bytes,memoryview |
| None type | None type |

Q.4. What is an expression made up of? What do all expressions do?

Ans4.> An expression is a combination of values, variables, operators, and calls to functions. Expressions need to be evaluated. Purpose of an expression is to create a value.

Q.5. This assignment statements, like spam = 10. What is the difference between an expression and a statement?

Ans.5.> Print statements and assignment statements are examples of statements that represent an action or instruction.

An expression is a set of variables, processes, and values that results in a numerical value.

Q.6. After running the following code, what does the variable bacon contain?

bacon = 22

bacon + 1

Ans.6.> 23

Q.7. What should the values of the following two terms be?

'spam' + 'spamspam'

'spam' \* 3

Ans.7.> spamspamspam

Q.8. Why is eggs a valid variable name while 100 is invalid?

Ans.8> Eggs a valid variable name while 100 is invalid because it is a rule that variable name never starts from value.

Q.9. What three functions can be used to get the integer, floating-point number, or string version of a value?

Ans.9.> int() = Used for integer

float() = Used for floating-point number

str() = Used for String version of values

Q.10. Why does this expression cause an error? How can you fix it?

'I have eaten ' + 99 + ' burritos.'

Ans.10.> This Expression causing error because 99 is integer and others are string type so we can resolve this issue by typecast the 99 to str

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

Output - I have eaten 99 burritos.