**Solutions: -**

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

\* **: Expression**

'hello' **: Value**

-87.8 **: Value**

- **: Expression**

/ **: Expression**

* **: Expression**

6 **: Value**

2. What is the difference between string and variable?

**Ans**: Variables store values or data in a program. But string is a type of data that can be stored inside a variable.

All strings are variable. But all variables are not string.

3. Describe three different data types.

**Ans:** int – Variables which stores whole integer values has datatype as int.

float – Variables which store decimal values has datatype as float.

str – Variables which store character values has datatype as str.

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

**Ans:** Expression is a combination of operators and operands. Expressions get evaluated and results in some value.

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

**Ans:** An expression can be evaluated and produce some result. A statement can assign, print or can use an expression to perform a task.

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

bacon = 22

bacon + 1

**Ans**: 22

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

'spam' + 'spamspam'

'spam' \* 3

**Ans**:

'spamspamspam'

'spamspamspam'

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

**Ans**: A variable name cannot start with an integer. It can only start with a letter or underscore.

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

**Ans:**

int()

float()

str()

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

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

Ans: You cannot directly concat a non-string variable with strings.

Correction: 'I have eaten ' + str(99) + ' burritos.'