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.

\* : **Expression**

'hello' **: Value**

-87.8 : **Value**

- : **Expression**

/ : **Expression**

+ : **Expression**

6 : **Value**

2. What is the difference between string and variable?

Answer. **String:-** A string is value that is stored inside “” or ‘’. Its datatype is String. **Variable:-** It stores a location of a value in the memory and it can store any data type like – string, int, floar, Boolean etc. Its data type depends on type of value that is being assigned to it.

3. Describe three different data types.

Answer.

1. Int – It consists of integer value. Example – 10,2000,2455,123 etc.
2. Float – It consists of fraction value – 10.0,23.456, 4453.35 etc.
3. Boolean – It consists of Boolean values : True and False.

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

Answer. Expression are made up of operators and operands. Operators can be mathematical - <,>,== etc. of or Boolean - and , or etc. All Expressions evaluate to either True or False as final result.

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

Answer. An expression will always give output as either True or False while assignment statement like spam = 10 will allocate the memory location to variable spam to store integer value of 10.

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

bacon = 22

bacon + 1

Answer : After running the above code, bacon will contain value 22 only.

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

'spam' + 'spamspam'

'spam' \* 3

Answer: Both the two terms will print ‘spamspamspam’ i.e smap will print 3 times.

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

Answer: It is because variable name can’t start with numeric character.

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

Answer: Couldn’t understand the question.

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

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

Answer: The above expression cause an error since the expression is trying to concatenate integer value(99) to the string value. Correct expression is :- 'I have eaten ' + `99` + ' burritos.'