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.

\* : **Operator**

'hello' : **value**

-87.8

- : **Operator**

/ : **Operator**

* : **Operator**

6 : **value**

2. What is the difference between string and variable?

ANS: **string is data type which is a collection of literals and variable stores the data. Variable can store string, int, float etc**

3. Describe three different data types.

ANS:

**int: int contains positive or negative whole real numbers. Eg. 45,-45**

**Float: float contains positive or negative decimal numbers eg. 45.6, 86.9**

**String: string is a collection of literals and string can be define with the help of ‘’ or “” eg. “Hello”**

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

ANS: **Expression can be made up of variable and/or operators and/or constants. Expression can return other value which can be of same type or other type**

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

ANS**: spam = 10 is expression. The expression is made up of operators, constant and variable and statement is a piece of code eg. Print(spam)**

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

bacon = 22

bacon + 1

ANS: **23**

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

'spam' + 'spamspam' : **spamspamspam**

'spam' \* 3 : **spamspamspam**

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

ANS**: variable name cannot start with number**

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**: Over here 1st and 3rd element is string where as 2nd element is int. we cannot combine or add the variable/value with different data type.**

**To solve this we can convert 99 to str.**

**'I have eaten ' + ‘99’ + ' burritos.'**