**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.**

\*

'hello'

-87.8

-

/

6

Sol:- Here values are “hello”, -87.8 and 6 where as expression are \*, -,+ .

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

Sol:- String are specific value which is store in certain variable. It is combination of different character.

Variables are special container which is used for storing specific values having some paths.

**3. Describe three different data types.**

Sol: the three main data types are:

1.Text: it is basically a string value.

2.Numeric : it is basically a integer, float, complex.

3.boolean: it is basically a Bool data type.

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

Sol: It is combination of specific values and operator. It allows us to give some values when we do calculation that perform some operation.

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

Sol:In a programming language expression is basically considered as combination of operator and operand that finally gives some value when we perform some operation on them. Here spam=10 is expression.

Statement: statement should give two values. Ex- if or while are statements.

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

**bacon = 22**

**bacon + 1**

sol: after executing the code ,we get 23 because we have to add 1 value on bacon which is 22.

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

**'spam' + 'spamspam'**

**'spam' \* 3**

Sol: 'spam' + 'spamspam' means spam(1+spam) as a output.

'spam' \* 3: here we have to cube the value of spam which is spamspamspam.

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

Sol: here in this condition,eggs=100 that’s gives number of 100 eggs on a specific location. We cannot store 100 as a variable in eggs because 100 is constant ,we cannot use constant as a variable.