1. In the below elements which of them are values or an expression? eg:- values can be integer or string and expressions( Highlighted in Green) will be mathematical operators ( Highlighted in Yelow) .

\*

'hello'

-87.8

-

/

+

6

2. What is the difference between string and variable?

**Variable is used to store the value it can be any value like alphabets , numbers whereas string is the datatype, data enclosed within “” is consider as string .**

3. Describe three different data types.

**List : data enclosed within square Braces [“Apple”,”orange”] , accepts duplicates , Ordered and data can be changed.**

**Tuples : data enclosed within Braces (“Apple”,”orange”) , accepts duplicates , UnOrdered and data cannot be changed.**

**Dictionary : data enclosed within Braces {} contains Key and Value pair ,cannot store duplicates , UnOrdered and data can be changed.**

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

Expression contains operators like ( +,-,\*,/) and Operands to produce a value

**Eg : c = a+str(b)**

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

**Expression is combination of value , Variable , operator to produce a result value which requires evaluation.**

**Statement are simple instruction that interpreter no needs to evaluate eg : Import stmt , assignment , for , while statements**

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

bacon = 22

bacon + 1

**bacon still holds the value 22 as the second step result is not stored to the variable bacon.**

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

'spam' + 'spamspam'

'spam' \* 3

**'spamspamspam'**

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

**A variable name must start with a letter or the underscore character. So 100 is not a valid variable name. a100 we can use instead.**

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

**int(10) , str(10) , float(10)**

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

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

**99 is an integer hence to convert the int to str we need to use as below.**

**'I have eaten ' + str(99) + ' burritos.' Or**

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