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.

\* Mathematical Operator

'hello' Value

-87.8 Value

- Mathematical Operator

/ Mathematical Operator

* Mathematical Operator

6 Value

2. What is the difference between string and variable?

**A:** String is a data type, variable is name/entity which is container of value.

3. Describe three different data types.

**A:** String,Integers,float,Tuples,Sets,Dictionaries,Boolean,complex numbers

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

**A:** Expression is made up of values/variables with certain operation or function, which gives certain output or value

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

**A:** Expressions produce value and certain operation, whereas statements do not produce value, they are declared or as used as condition or declaration.

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

bacon = 22

bacon + 1

**A:** 22

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

'spam' + 'spamspam'

'spam' \* 3

**A:** Both gives output of ‘spamspamspam’

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

**A: ‘**eggs’ is a string data type which is acceptable for variable naming, where as 100 is a numeric value which cannot be used while using them as variable. It becomes a problem to consider it as numeric value or variable name.

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

**A:** int() , float() , string

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

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

**A:** The Expression causes error because 99 is numeric value which cannot be printed as string type, unless str() is used. The correct syntax would be as follows.

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