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

**Ans: Values : 'hello', -87.8, 6**

**Opeators: \*,-,/**

**Expression : -87.8/6**

2. What is the difference between string and variable?

**Variable : Is an identifier used to store values in memory location and use it later when needed**

**String: Any value with single quote or double quotes we assigned to a variable is called a string**

3. Describe three different data types.

Text Type: String

Any data within a single code or double code considered as string

Numeric Type : int, float, complex

Int: Integer can be of any length without any limitation

Float: a float value can be represented by 1.0

Sequence Type: Tuple, range, list

List : A list can be used to store multiple items with any datatype enclosed in []

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

**An expression in python consists of variables and operators.eg a+5**

**An expression produces a new value by interpreting operators and operands**

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

**An expression evaluates a value**

**A Statement is used to declare or display a value**

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

bacon = 22

bacon + 1

**The variable bacon contains 22**

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

'spam' + 'spamspam'

'spam' \* 3

**In both the cases value would be 'spamspamspam'**

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

**A variable name always starts with a letter or underscore letter in python**

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

**Int(),float() and str() can be used**

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

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

**Reason is concatenate can do with str (not "int") to str**

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