**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.**

\* --------------> expression - --------------> expression

/ --------------> expression 'hello' --------> value

-87.8 ---------> value 6 --------------> value

+ -------------> expression

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

String is a data type which is used for a sequence of characters (for example “abcdefg23”. Besides letters, they can also include numbers, spaces, punctuation. Variables on the other hand are a reference that you create to values in your program that you may or may not call later.

1. **Describe three different data types.**

Integers - (int) these store numeric values declared by the user.

String - (str) these store a sequence of characters enclosed by quotation marks ,declared by the user.

List - A list contains various items separated by commas and enclosed within square brackets [ ].

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

Expressions are made up of identifiers, operators and literals. Basically expressions are used to evaluate or check conditions and return some value.

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

An expression can be defined as any element in our program that evaluates and returns a value. A statement does something like it represents something or it is a command. For e.g print statements to print value of something or just print a string etc, assignment statements to assign a value to a variable.

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

**bacon = 22**

**bacon + 1**

The variable bacon contains 23.

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

**'spam' + 'spamspam'** ------- spamspamspam

**'spam' \* 3** ------------ spamspamspam

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

Eggs is a valid variable name since it is not any inbuilt function name in python. 100 is an invalid variable name because 100 is an integer.

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

int(), float(), and str()

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

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

It causes an error because for string concatenation we need all strings but 99 is of type integer. So if we want to fix this error we have to correct 99 as ‘99’ which now considers it as a string.