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.

\* This is an expression

'hello' This is a String value

-87.8 This is a value

- This is an expression

/ This is an expression

* This is an expression

6 This is a value

2. What is the difference between string and variable?

A) A variable is nothing but the location where the data is stored and string is one of the

data type which can be stored in the variable.

Ex: String x=”inueron” . Here x is the variable and the value stored in is of type “String”

3. Describe three different data types.

A) **Integer** : Integer data types represent the whole numbers in programming.

**String** : A string data type is a combination of characters that can be constant or variable.

**Boolean**: Boolean data is what programmers use to show logic in code. It's typically one of two values—true or false

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

A) An expression is made up of operators and operands. Here operator defines the type of action that need to be performed on the operands and operands are those which represent the data. Basically any kind of expression evaluates the combination of operators and operands to the single value ( can be integer, character or logical value).

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

A) An expression evaluates to a value whereas statement is a kind of instruction which tells to do something. For example in the above statement spam=10, this is a statement which is instructing to assign a value 10 to the spam. Every expression can’t be a statement but every statement can be an expression.

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

bacon = 22

bacon + 1

1. The variable bacon=22 after the execution of the above code.

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

'spam' + 'spamspam'

'spam' \* 3

A) 'spam' + 'spamspam' Result : 'spamspamspam'

'spam' \* 3 Result : 'spamspamspam'

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

A) According to the naming rules of a variable, variable can start with a letter or underscore and then can be followed by numbers but cannot start with the numbers. So eggs is a valid variable name and 100 is invalid.

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

A) The int(), float() and str() are the functions that can be used to get the integer, floating-point number, or string version of a value.

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

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

1. This statement causes below type error: **TypeError**: can only concatenate str (not "int") to str.

This can be fixed using the below change in the code:

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