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.

\* : expressions

'hello' : values

-87.8 : values

- : expressions

/ : expressions

* : expressions

6 : values

2. What is the difference between string and variable?

String is a Data type which can only store values in the form of a string.

Variable is something we create to store any data and use it for further code. Variable may be of any data type like Integer, Float, Long, String etc

3. Describe three different data types.

Integer which can store values in form of number like 1, 944949849, 546546.

Float/Long which can store data in form of decimal numbers like 2.5, 33.88 etc

String which can be used to store any type of data in string form like array of characters, numbers anything like nishantgaba, 45454hushsn, ineuron888, or even just a numerical value like 45464 but it will be in form of string.

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

Expressions are generally a statement made up with the use of operators. They are widely used to perform mathematical operations like addition, division etc

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

The above statement is assigning value 10 to variable spam. But the expressions are used to perform some arithmetic operations on any more than 1 variable and then store its value in the assigned variable

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

bacon = 22

bacon + 1

bacon value is now 23

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

'spam' + 'spamspam' : spamspamspam

'spam' \* 3 : spamspamspam

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

Variables name cannot be created using a numerical value.

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

int(), float(), str()

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

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

Since we are trying to perform arithmetic operations on 2 different data types i.e. string and integer.

To make this work first we need to convert 99 into string data type

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

Now we can expect output to be:

I have eaten 99 burritos.