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?

A **string** is a sequence of characters created by enclosing characters inside a single quote or double-quotes.

A variable is a reserved memory location to store values.

3. Describe three different data types.

- **String** - String is a sequence of characters

- **List** – List is a ordered collection of data

- **Boolean** - Data type with one of the two built-in values, True or False.

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

An **expression** is a Number when combined with operators that is processed to produce some desired output.

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

A **statement** is an instruction that a Python interpreter can execute and **expression** is a Number when combined with operators that is processed to produce some desired output.

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

bacon = 22

bacon + 1

- One will be added to the variable, bacon = 23

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

'spam' + 'spamspam'

'spam' \* 3

The both statement will return spamspamspam.

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

A variable name must start with a **letter** or the **underscore character** and not with a number.

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

- int(value)

- float(value)

- str(value)

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

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

- because we are trying to add integer and string data type values.

We can fix the error by adding quotes around 99

- 'I have eaten ' + ‘99’ + ' burritos.'