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

**Answer**: - Values – ‘hello’, -87.8, 6

Expression - \*, -, /, +

2. What is the difference between string and variable?

**Answer**: - The string is a series of characters, one of the data types.

Variable works as a container, it is used to store a value or assign a value in code.

The string can be stored in a variable i.e, the string is a data type and the variable is an identifier.

3. Describe three different data types.

**Answer**: - String, Integer, Floats

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

**Answer**: - An expression is a combination of values, variables, operators, and calls to functions.

Expressions are valid combinations of operators and they are used to make logical statements that will give the desired results and perform the desired functions.

5. This assignment statements, like spam = 10. What is the difference between an

expression and a statement?

**Answer**: - Expression is that piece of code that produces a value, a statement on the other hand is an entire line of code that performs a certain function.

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

bacon = 22

bacon + 1

**Answer**: - bacon = 23

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

'spam' + 'spamspam'

'spam' \* 3

**Answer**: - spamspamspam

‘spam’\*3 will show an error as they both have different data types.

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

**Answer**: - The variable can start from a lowercase or uppercase alphabet, it can also start with ‘\_’, while the eggs satisfy the condition, 100 is just a number and cannot be kept as a variable.

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

**Answer**: - Int ()

Str ()

Float ()

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

**Answer**: - 'I have eaten ' + 99 + ' burritos.'

As ‘99’ and ‘burritos’ both have different data types, they are first needed to be converted into the same data type.

‘I have eaten ‘+ str (99) + ‘burritos’