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

'hello' --- Value

-87.8 --- Value

- ----- Expression

/ ----- Expression

* ----- Expression

6 ---- Value

2. What is the difference between string and variable?

String is a datatype of the value whereas variable is an entity which holds the value.

3. Describe three different data types.

String – it a collection of characters or numbers defined within double or single quotes.

Eg: “Hello, World”

Int --- Integer is a positive or negative number without decimal. Eg: 69

Float --- Both negative or positive numbers with decimal. Eg: 69.8

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

An expression is a mathematical operator. They are used to perform arithmetic operations.

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

An expression is a mathematical operator where as a statement is a line of code executed by a programme.

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

bacon = 22

bacon + 1

The variable bacon now contains 23

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

'spam' + 'spamspam'

'spam' \* 3

For both the terms the value will be 'spamspamspam '

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

Variable name cannot start with a number so python gives an error.

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

type() , isinstance() , \_\_class\_\_

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

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

A string cannot be concatenated with an integer 99. So we can covert the integer 99 to string ‘99’ to fix the issue as below.

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