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?

**Ans:** String: String can be written inside the quotes for example "apple", 'apple'

Variable: variable is a reserved memory location to store values.

3. Describe three different data types.

**Ans:** List: the list is used to store multiple data items in a single variable.

Integer: integer can store only numerical values.

Float: float can store only floating values such as 233.33, 22.2, etc.

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

**Ans:** Expression is made up of values, containers, and mathematical operators (operands) for example., a = 2 + 3 and expressions are used to evaluate the values or represent the result on the screen.

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

**Ans:** Expression is made up of values, containers, and mathematical operators (operands) and the statement is just like a command that a python interpreter executes like print.

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

bacon = 22

bacon + 1

**Ans:** It gives 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?

**Ans:** We cannot start the variable name with number. if we, we should begin with, a string-like alphabet name then integer or we can use underscore. \_100 or e100 is valid.

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

**Ans:** str(), int(), float()

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

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

**Ans:** because 99 is an integer it cannot be concatenated with strings, if we have to concatenate it we need to do typecasting.