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’ String

-87.8 Integer

- Expression

/ Expression

* Expression

6 Integer

2. What is the difference between string and variable?

Ans: String: It is a type of data type which stores string values. For example, ‘hello’

Variable- It is defined as a storage which can store different types of data inside it depending on the type of data. For example, int (numerical), string (set of chars), char (characters)

3. Describe three different data types.

Ans: Integer- stores numeric values, strings- it can store set of chars, char- it can store characters.

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

Ans: It is a combination of variables and mathematical operators. For example, a + b. All expression performs operations over variables and returns a value. Example, c=a + b.

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

Ans: Expression perform actions on operands and returns a value while statements are standalone and don’t return anything.

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

bacon = 22

bacon + 1

Ans: 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: Because eggs follows variable name conventions while 100 is an integer which is not valid as per the rule.

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

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

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

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

Ans: Because it is a combination of strings and integer which is not compatible to each other. It can be solved by typecasting integer to str