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' : values

-87.8 : values

- : expression

/ : expression

* : expression

6 : values

2. What is the difference between string and variable?

Ans. String is type of information that can be stored in a variable. Variable is a store of any type of data or information. For example. ‘My name is Kalyan’ is a string type of data. a=10, a = ‘abc’ here ‘a’ is a variable

3. Describe three different data types.

Ans. String, Integer, Decimal

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

Ans. An expression is a combination of operators and operand that is meant to give a resultant value. Basically, expressions are designed to get a required result from the numerical/string/class/function we have.

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

Ans. A statement is an instruction that a Python interpreter can execute. So, in simple words, we can say anything written in Python is a statement. Python statement ends with the token newline character. It means each line in a Python script is a statement. For example, a = 10 is an assignment statement.

Expressions are representation of value. Expressions are different from statement from the fact that, statement do something but expressions itself represents value. For Example any string is also an expression since it represents the value of a string.

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

bacon = 22

bacon + 1

Ans. 22

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. Variable names should start with alphabets (A-Z, a-z) or underscore (\_).

Since, the memory address are hexadecimal values. Hexadecimal value always starts with a numerical values. So to avoid anonymity any variable name should not start with a number.

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. The error will arise due to the difference in type of the data getting concatenated. We cannot concat a string and int type of data.

Correct approach will be like this : 'I have eaten ' + ‘99’ + ' burritos.'