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.

\* is expression

‘hello' is value

-87.8 is values

- is expression

/ is expression

* Is expression

6 is value

2. What is the difference between string and variable?

Ans: Variable is a symbol which we can use to store a data/values in a program, whereas, string is the data, so we can use them to fill a variable.

3. Describe three different data types.

Ans.: Following are the different types in python:

Numeric: Integer, Float and Complex Number

Sequence Type: String, List and Tuple

Dictionary

Boolean: True and False

Set

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

Ans: An expression is a construct made up of variables, operators, and method invocations which are constructed according to the syntax of the language and all expressions yields a result value.

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

Ans: Expression is a combination of variables, operations and values that yields a result value, whereas, statement represents an action or command e.g. print statements, assignment statements. Therefore, expressions are representation of value and they are different from statement in the fact that statements do something while expressions are representation of value.

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

bacon = 22

bacon + 1

Ans.: variable bacon still contains 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: eggs is a valid variable name while 100 is invalid because variable name must start with a letter or the underscore character

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

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

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

'I have eaten ' + 99 + ' burritos.’

Ans: The expression in a question cause an error because we are trying to add different data types. We can fix the error by putting 99 in ‘’ i.e. 'I have eaten ' + ’99’ + ' burritos.’