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.

\*

'hello'

-87.8

-

/

6

Answer –>

**Expressions** - \*, -, /, +

**Values** – 'hello', -87.8, 6

2. What is the difference between string and variable?

Answer –>

Variable is used to assign values to it. String is a data-type that stores one or more characters within single, double, or triple quotes. String can be stored in variable

3. Describe three different data types.

Answer –>

1. Numeric -> Numeric Data-type represents data that has numeric value. Ex:- Integer, float, Complex Numbers
2. Sequence -> It is an ordered collection of same and different data-types. Ex:- String, list, Tuple
3. Boolean -> This contains only 2 built-in values, i.e., True or False

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

Answer-> Expression consists of Operators and Operands. The combination of operators and operands are interpreted together to produce some other value

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

Answer -> Assignment Statement is used to assign a literal, value, result of an expression to a variable whereas expression is a combination of operators and operands that produces some output

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

bacon = 22

bacon + 1

Answer -> The variable bacon contains 22.

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

'spam' + 'spamspam'

'spam' \* 3

Answer -> The output will be same for both, i.e., ‘spamspamspam’

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

Answer -> It is because variables in python cannot start with a numeric number

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

Answer -> int (), float(), str()

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

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

Answer -> It is because strings can’t be added to numerics