**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.

**Ans:** \* = Expression

'hello' = Value

-87.8 = Value

- = Expression

/ = Expression

* = Expression

6 = Value

**2.** What is the difference between string and variable?

**Ans:** String is a type of information whereas the variables are used to store the information. Variable first letter can never be an integer but a string’s first letter can be an integer.

**3.** Describe three different data types.

**Ans:** Different data types are –

Numeric: This data types contains integers, float (decimal number) and complex number.

Boolean: This data type contains only two values i.e True or False. We can evaluate an expression in python and can get an out whether its True or False.

Sequence: It contains list, tuple and list. It allows to store data in an organised and efficient format

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

**Ans:** An expression is combination of operator and operand. There could be multiple operand and operand in an expression. All expression always gives you a final result of it whether it be Boolean, Float, integer, etc Different type’s expressions are-

1. Arithmetic Expression
2. Constant Expression
3. Integral Expression
4. Floating Expression
5. Relational Expression
6. Logical Expression
7. Combinational Expression
8. Bitwise Expression

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

**Ans:** Expression evaluates to a value whereas statement does not evaluates to a value.

**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'

'spam' \* 3

**Ans:**

Input: ‘spam’ +’spamspam’

Output: spamspamspam

Input: ‘spam’ \* 3

Output: spamspamspam

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

**Ans:** Egg is valid variable because as per rule its first letter start with a letter whereas 100 starts with an integer

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

**Ans:** integer = int()

Float = float()

String = str()

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

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

**Ans:** Because a string cannot be added to an integer or vice versa.