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 – Values-** ‘hello’, -87.8, 6; **Expression -** \*, -, /, +

2. What is the difference between string and variable?

**Answer-** A string is a set of characters (usually word or sentence) whereas a variable is a allocated space and it can be integer, string, float or Boolean. Ex- a= “Ankit”. Here a is variable and “Ankit” is string.

3. Describe three different data types.

**Answer-** Numeric 🡪 (integer, float, complex), String (str), Boolean (True, False)

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

**Answer-** A combination of operands and operators is called an expression. Expression is used to do logical calculations.

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

Example-

spam = 10 # a statement

x = spam + 70 # an expression

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

bacon = 22

bacon + 1

**Answer-** bacon will still contain 22 only.

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

'spam' + 'spamspam'

'spam' \* 3

**Answer-**  'spamspamspam'

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

**Answer-** A variable name cannot start with a number.

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

**Answer-** int(), float() and str() respectively.

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

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

**Answer-** Because it will only concatenate string and not integer.

**Resolve by-** 'I have eaten ' + '99' + ' burritos.'