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?

* String → it is a data type
* Variable → it is to store the data of any data type

3. Describe three different data types.

* Int → data type for any integers
* Float → data type for decimal values
* Bool → data type for True/ False
* String → data type for text format

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

* Expression is made up of combining data and operators to produce an end result or generate new value. Ex : 2+3, 2\*4, 2==1.

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

* Expression is to generate or produce new value and Statement is a code to perform some actions.
* Expression needs to be evaluated, Statement need to be executed.
* Expression → 2 +3, 4\*5, Statement → while True:, import os, spam=10.

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

bacon = 22

bacon + 1

* It contains 22 only, because we are not storing bacon+1 value back to bacon.

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?

* As per python variable naming standards, variable name cannot start with numeric value so 100 is invalid. Eggs is valid one because variable name can start with any character and eggs is not an predefined function.

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

* int() → convert the value into integer
* float() → convert the value into float
* str() → convert the value into string

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

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

* We cannot add int and str values. Convert int value to string using str(), and then we can add
* 'I have eaten ' + str(99) + ' burritos.'