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.

\* – Operator (multiplication)

'hello' – Value (String)

-87.8 – Value (Float)

- – Operator (Subtraction)

/ – Operator (Division)

* – Operator (Addition)

6 – Value (Integer)

2. What is the difference between string and variable?

– Variable can be termed for definition of any data type, but string is a particular type of variable containing a combination of characters together.

3. Describe three different data types.

* String – Combination of multiple characters
* Integer – A number without decimal part, can be negative
* Float – A number with decimal part included.

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

– Expression is a combination of multiple variables (operands) with operators in between. They help for definition or assignment of new/existing variable with new values.

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

– Expression helps getting variable values after multiple operations, so some logic plays role to get the value. Statement is simple definition when a new variable is created.

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

bacon = 22

bacon + 1

– 22. The 2nd line of code did add 1 to existing bacon value but didn’t assign it back to any variable.

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?

– Variable name has to be alphanumeric (can be alphabets only), and cannot start with a numeric value.

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

– Type casting: int(), float(), str()

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

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

– 'I have eaten ' + str(99) + ' burritos.'