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

**Solution: 6 is an integer, -87.8 is afloat datatype, ‘hello’ is string, \* - / + are mathematical operators**

2. What is the difference between string and variable?

**Solution: A string is a datatype and a variable which holds or allocates a data to the respective variable.**

3. Describe three different data types.

**Solution: The three different types of datatypes are integer/float, string, Boolean.**

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

**Solution: An expression is a combination of operators and integers/float to form some other values, we have different types of expressions like Arithmetic expression, Integral expression, Floating expression, Relational expression, Logical expression, Bitwise expression, etc.**

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

**Solution: Statements represent an action or command e.g print statements, assignment statements.** **Expression is a combination of variables, operations and values that yields a result value**.

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

bacon = 22

bacon + 1

**Solution: 23**

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

'spam' + 'spamspam'

'spam' \* 3

**Solution: 'spam' + 'spamspam' >> ‘spamspamspam’**

**'spam' \* 3 >> ‘spamspamspam’**

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

**Solution: There are certain rules for variable assignment and we can assign integer as a variable where as we can assign string as a variable.**

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

**Solution: int(), float(), str()**

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

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

**Solution: The above expression causes error because we cannot concatenate string datatype with integer datatype.**