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.

*   **Mathematical operators**

'hello'   -**String**

-87.8   -**Float**

-

/   -**Mathematical operators**

   +   -**Mathematical operators**

6   -**Integer**

2. What is the difference between string and variable?

Answer: - Variables are symbols that you can use to store data in a program. You can think of them as an empty box that you fill with some data or value. Strings are data, so we can use them to fill up a variable. Declaring strings as variables can make it easier for us to work with strings throughout our Python programs.

3. Describe three different data types.

Answer: - Three different data types are **string, Integer and Float**

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

Answer: - An expression is a construct made up of variables, operators, and method invocations, which are constructed according to the syntax of the language, that evaluates to a single value. The expression in Python produces some value or result after being interpreted by the Python interpreter. An expression in Python is a combination of operators and operands.

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

Answer: - An expression evaluates to a single value. A statement does not.

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

bacon = 22

bacon + 1

Answer: 23

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?

Answer: - variable names must start with a letter (a-z, A-Z) or an underscore (_). They 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: - The int(), float(), and str() functions will evaluate to the integer, floating-point number, and string versions of the value passed to them.

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

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

Answer: - concatenation requires both operands to be of the same type.

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