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

**Ans : Expression: \*, -, /, +**

**Values: ‘hello’, -87.8**

2. What is the difference between string and variable?

**Ans: A Variable is a store of information, and a String is a type of information you would store in a Variable. A String is usually words, enclosed with "".**

3. Describe three different data types.

**Ans: String – It is a collection of Unicode characters (letters, numbers and symbols) that we see on a keyboard.**

**Numerical – These data types store numerical values like integers, floating-point numbers and complex numbers.**

**Boolean – A Boolean is used when we wish to restrict data to True/False or yes/no options.**

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

**Ans: An expression is a combination of operators and operands that is interpreted to produce some other value. In any programming language, an expression is evaluated as per the precedence of its operators.**

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

**Ans: expression” is a combination of values and functions that are combined and interpreted by the compiler to create a new value, as opposed to a “statement” which is just a standalone unit of execution and doesn't return anything.**

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

bacon = 22

bacon + 1

**Ans: 22**

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

'spam' + 'spamspam'

'spam' \* 3

**Ans: spamspamspam**

**spamspamspam**

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

**Ans: Variable names cannot begin with a number.**

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

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

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

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

**Ans: TypeError: can only concatenate str (not "int") to str**

**Solution: 'I have eaten ' + str(99) + ' burritos.'**

**'I have eaten ' + ‘99’ + ' burritos.'**