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' **: Value**

-87.8 **: Value**

- **: Expression**

/ **: Expression**

+ **: Expression**

6 **: Value**

2. What is the difference between string and variable?

**Ans: A string is a type of data in which information is in the form of sequence of characters; whereas a variable stores the data and it can be of any type (integer, float, string, etc.).**

3. Describe three different data types.

**Ans: integer: it contains integer values,**

**floating point numbers: it contains decimal values,**

**string: it is a sequence of characters**

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

**Ans: An expression is a combination of values, variables, operators. Expressions need to be evaluated. If Python is asked to print an expression, the interpreter evaluates the expression and displays the result.**

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

**Ans: An expression evaluates and gives a single value as output whereas a statement doesn’t do that.**

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

bacon = 22

bacon + 1

**Ans: bacon = 22  
 the value ‘bacon + 1’ is not reassigned to bacon so it won’t increment.**

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?

**Ans: ‘eggs’ is valid variable name while ‘100’ is not because a variable name should always start with an alphabetic letter and 100 is an integer as a whole.**

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: The error is caused because 99 is an integer and concatenation are possible only in strings. The correct statement would be: ‘I have eaten’ + str(99) + ‘burritos’**