**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.**

**Ans**:-

\* - **expression**

'hello' - **string value**

-87.8 - **integer value**

- - **expression**

/ - **expression**

* - **expression**

6 - **integer value**

**2. What is the difference between string and variable?**

**Ans:-** Variable is the name or identifier given for a particular value whereas string is collection of characters.

**3. Describe three different data types**.

**Ans:-** 1. String - It is a collection of alphabets or characters and is specified using double quotes.

2. Integer- It consists of positive and negative numbers excluding the decimal numbers.

3. Float - It consists of all the real number including number that are factors or decimals.

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

**Ans:-** An expression can be made up of mathematical equations, identifiers, etc. All the expression are evaluated and provide a result for the same.

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

**Ans:-** For assignment statements, like spam = 10, it shows that the variable spam has a assigned value of 10.

**Difference between a nexpression and a statement:-**

1. An expression will eventually provide you with a result whereas a statement would not be evaluated.
2. As per the syntax , every expression can be considered to be a statement but every statement cannot be an expression.

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

**bacon = 22**

**bacon + 1**

**Ans:-** bacon will contain value as 22. It is because bacon + 1 is not the correct syntax to increase the value to 2 instead it should have been bacon+=2.

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

**'spam' + 'spamspam'**

**'spam' \* 3**

**Ans:-** value for first term:- spamspamspam  
 value for second term:- spamspamspam

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

**Ans:-** eggs is a variable name it follows all the rules for naming a variable/identifier in python whereas 100 is invalid as a variable name cannot start with a number in python.

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

**Ans:-** You can use the functions int(), float() and str() to get the integer, floating-point number, or string version respectively of a value.

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

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

**Ans:-** It will cause an error as 99 is an integer and you cannot directly concatenate an integer to a string.  
You can convert 99 to string using the str() function and thus remove the error. Below is the correct way to concatenate the given string.  
'I have eaten ' + str(99) + ' burritos.'