1. What are the differences between operators and values in the following?

\* : it is an mathematical operator used for multiplication

'hello' : it is string

-87.8 : it is negative float number

- ; it is an mathematical operator used for subtraction

/ : it is an mathematical operator used for division

+ : it is an mathematical operator used for addition

6 : it is an integer

Following are values in above mentioned question;  
‘hello’, -87.8, 6

2. What is the difference between string and variable?

Spam : Variable is an container, which stores information in it. Same information can be recalled using that variable name in code. Here in this case **Spam is a variable.**

'spam' : String contains group of characters enclosed in quotation marks (“ “ or ‘ ‘). String is value which can be stored in a variable. Here in this case **‘spam’ is a string.**

3. Describe three different data forms.

Ans: (1) String, (2) Integers, (3) Float numbers, (4) Boolean

4. What makes up an expression? What are the functions of all expressions?

Ans:

Part 1: Expression are made up of values and operators

Part 2 : The function of an expression is to evaluate and return final value of expression post evaluation.

5. In this chapter, assignment statements such as spam = 10 were added. What's the difference between a declaration and an expression?

Ans :

Declaration, is where we declare a value to a variable.

Expression, is where we evaluate the multiple values to a single value

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

bacon = 22

bacon + 1

Ans: the variable bacon will contain value 22, as in second line we are not assigning the expression to variable.

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

'spam' + 'spamspam'

'spam' \* 3

Ans: Both results in **'spamspamspam'**

8. Why is it that eggs is a true variable name but 100 is not?

Ans: variable name cannot begin with a number

9. Which of the following three functions may be used to convert a value to an integer, a floating-point number, or a string?

Ans:

To convert to integer : **int()**

To convert to float : **float()**

To convert to string: **str()**

10. What is the error caused by this expression? What would you do about it?

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

Ans:

Part-1 : The error will be ***TypeError: can only concatenate str (not "int") to str.***

Part-2 : To resolve the error we can put the numerical value (i.e. 99) in quotation mark like “99” or convert it into string using **str(99)**