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

Operators : An operator is special symbol that performs computation like addition , subtraction, multiplication etc.

Values : A value may be character or number or alphanumeric etc

\* : operator which perform multiplication

'hello' : is a Value

-87.8 : is a value

- : is a subtraction operator

/ : is operator used for division

+ : is operator used for Addition

6 : is a value

1. What is the difference between string and variable?

A string is a type of information or value or data and Variable is a reserved memory location of store values. In general variable represents a value assigned to it

Spam - variable any value can be assigned to it .

'Spam' - value

1. Describe three different data forms.

Integers, strings and Booleans are three Major data forms

Integers represents numerical values like 1,2,3 ,1.5 etc

Strings can be any alphanumeric ,numeric or alphabetical character usually enclosed in double or single quotes.

Booleans is a logical data type has one of two possible value TRUE OR FALSE

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

Expressions are used to implement a particular task. It is a combination of Operators, Operands and Constants.

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

A function expression is very similar to and has almost the same syntax as a function declaration . The main difference between a function expression and a function declaration is the function name, which can be omitted in function expressions to create anonymous functions.

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

bacon = 22

bacon + 1

By running first line variable bacon is assigned with value 22.

By running second line we get the value 1 greater than bacon value i.e adding 1 to bacon value that is 23.

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

Value of two terms is same

spamspamspam

'spam' + 'spamspam'

'spam' \* 3

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

Because variable names should be started with alphabets only .

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

**int(x)**  
Converts x to an integer

float(x)

Converts x to floating number

str(x)

converts x to string

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

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

To concatenate each value should be in a string form but in given expression 99 is a integer, So error takes place to avoid error we should convert integer to string by putting number in single or double quotes.