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

\*

its a operator which multiplies two entities.

'hello'

holds a string value

-87.8

holds a floating point value

-

subtracts two entities

/

divides two entities

+

adds two entities

6

holds integer value

2. What is the difference between string and variable?

spam

'spam'

variable is basically a kind of allocated memory that is present in the main memory with some values inside it and whenever we need to use this variable , we can call it from the main memory.While a string is basically just a text level value.

3. Describe three different data forms.

Integer- Data type that contain integer values

Float- Data that contains values with decimals

Boolean- Data that contains binary values , either true or false.

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

Combination of values and functions and operators makes up an expression.

values - that holds some stagnated or variable definition.

functions- that runs when it is called in the program and perform some operations.

operators - that runs inside function and does the calculation.

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

Declaration holds single value and contains single element, whie expression is that is evaluated using functions , operators or values.

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

bacon = 22

bacon + 1

23

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

'spam' + 'spamspam'

'spam' \* 3

spamspamspam

spamspamspam

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

Because 100 is a numeric value inside every programming language which makes the compiler figure out wether its a declaration or wether its a variable , as a result the program output results inefficient output.

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 for integer

float for floating point number

str for string

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

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

error cause is due to single quotes(''), to rectify it we must use double quotes("")