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

\* - it is use to multiply two numbers or strings

'hello'- It is simple string comment

-87.8 – it is negative value with decimal

- it is use to subtract two numbers

/- to divide numbers

+ - to add numbers and concatenate strings

6 – it is a number

2. What is the difference between string and variable?

Spam – it is variable and can store any value

'spam'- it is strings

3. Describe three different data forms.

1- Categorical or Qualitative Data- it is called where we have category type data in dataset

2- Numerical or Quantitative Data- where we can count numbers based on category is called quantitative data.

3-Continuous and discreet – we can understand these two data forms by example height, temperature is continuous because there is no limit define but discreet, we have exact count and limit too like total city count in India etc.

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

Basically, expression is use to check conditions in programming languages and it gives us output as True or false based on criteria define.

<- it compares whether value is less than or not

> it compares whether value is greater than or not

== it compares whether value is equal or not

! = it compares whether value is not equal or not

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

Spam – variable and it is declaration

= it is an expression and asking variable to store 10 (value) in it

Variable can be change based on assign value but expression always remain same and bound to perform its predefined instruction.

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

bacon = 22

bacon + 1

it gives output as 23.

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

'spam' + 'spamspam'

'spam' \* 3

Both will generate same output = ‘spamspamspam’

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

Because eggs can store any value like 1123gh etc. But 100 is number and can not store any data. That is why eggs can store 100 value but 100 can not store eggs value in it.

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(value), float(value), str(value)

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

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

99 is not string here that is why we will get the error if we execute this statement.

To get the output we need to write this code mentioned below:

'I have eaten ' + str (99) + ' burritos.'