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

\*

'hello'

-87.8

-

/

+

6

Ans1: Using the operators here (\*, /,-, +) we can manipulate the values (‘hello’,-87.8,6).

2. What is the difference between string and variable?

spam

'spam'

Ans2: String is a sequence of letters or symbols, which can be stored in a variable. String is one among different types of values. Variable is something where we store data/information.

Here spam is a variable. ‘spam’ is a string.

3. Describe three different data forms.

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

Expression is the piece of code with which we communicate the compiler how the things get done by the compiler . Expression is a combination of variables, values, operators, keywords, punctuators, literals etc...

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

Declaration means we are informing the compiler that a variable, its type, initializing it with some values… It helps the compiler to know about the properties of a variable.

Expression is the piece of code in which we inform the compiler that where this declared values should be used and how it should be used etc…

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

bacon = 22

bacon + 1

Ans6: The value of bacon won’t change. It will be the integer value 22 only.

But while running the second line the output will be 23.

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

'spam' + 'spamspam'

'spam' \* 3

Ans 7: Outputs for both the lines are same and it is as below

‘spamspamspam’

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

Ans 8: We cannot use numerical values as variables. 100 is a numerical value which we can assign to a variable named ‘eggs’. Variable is an identifier which we use to identify a particular value , which assigned to the variable ‘eggs’.

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

Question is no clear!!!

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

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

Ans: **TypeError**: can only concatenate str (not "int") to str

Above is the error what we are getting. What we understand from the above is along with the string type of values we cannot concatenate an integer value. So we have to convert the integer value as a string for thet we have to put 99 in “”. “99”

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

For the above line , the output is as below.

'I have eaten 99 burritos.'