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

\*

'hello'

-87.8

-

/

+

6

Answer :

\* - / + arithmetic operators for multiplication, subtraction, division and addition

‘hello’ is a string type

-87.8 – is a negative value with int type

6 is a positive value with int type

2. What is the difference between string and variable?

spam

'spam'

Answer : ‘spam’ is a string as it is in quotes and spam and is variable where values can be assigned to.

3. Describe three different data forms.

Answer : Numeric,String and Boolean are the inbuilt data types.

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

An expression is a combination of values, variables, operators, and calls to functions.

List comprehension,Dictionary comprehension,Generator comprehension and Conditional generator

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

Declaration in general is binding to a data type , in python declaration not needed as every variable in python is an object. We can assign a value to a variable and start using it.

Expressions are representation of value.

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

bacon = 22

bacon + 1

Answer = 22

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

'spam' + 'spamspam'

Answer : 'spamspamspam'

'spam' \* 3

Answer : 'spamspamspam'

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

Answer : The object identifier are assigned to the reference variable and when egg is used it’s an alphanumeric Python will assign the value ,but when 100 is used the python interpreter will throw error . Chances both object identifier and variable name could be same(Assumption).

May be from readability point also the variable name with only numerals could be confusing.

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

Answer : e.g. x= 12 , int(x) , float(x) ,str(x)

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

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

**Answer :**

**Error message - TypeError**: can only concatenate str (not "int") to str

Remove the int or put the int in a quotes so that the string can be concatenated.

'I have eaten ' + ‘99’ + ' burritos.'