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

\*

'hello'

-87.8

-

/

+

6

**Answer:**

Operators - \*, -, /, +

Values – ‘hello’, -87.8, 6

2. What is the difference between string and variable?

spam

'spam'

**Answer:**

String – ‘spam’ (since it is encapsulated within ‘’)

Variable – spam

3. Describe three different data forms.

**Answer**

String – Any value with character or characters encapsulated within inverted commas are of data type string

Integer – All positive or negative whole numbers without decimal value are integers, with decimal are called float

Boolean – A value which is True or False

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

**Answer**

A combination of operands and operators make an expression. Even a single value is an expression. Expressions executes and gives a value

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

**Answer**: Expression is something which gives a value or a value itself and statement is something that makes a line, also an expression can be a part of statement or a statement itself. In the example 10 is the expression and spam = 10 is the statement.

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'

'spam' \* 3

**Answer:**

spamspamspam

spamspamspam

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

**Answer:**

Because variable name cannot start with a number

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:**

int(), float(), str()

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

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

**Answer:**

It will give a type error since string type cannot be added to int type

Solution would be typecasting:

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