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

\*

'hello'

-87.8

-

/

+

6

1. multiply integers or use with regex for wildcard
2. string which is also immutable
3. negative integer
4. calculation of minus on numeric values or can be used in regex as range (a-z)
5. divide numeric values
6. add numeric/non-numeric values and also in regex indicates for one or more occurrences
7. number 6 can be used as a character or numeric value

2. What is the difference between string and variable?

spam

'spam'

a variable denotes an assignment in memory and a string can be a value of an assignment

3. Describe three different data forms.

boolean: denotes a false or true mode

string: can be any value written between quotes (‘bla’)

integer: a numeric value

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

when an operator uses an expression for further calculation; addition, subtraction, division and multiplication

5. In this chapter, assignment statements such as spam = 10 were added. What's the difference between a declaration and an expression? a declaration will have a memory space reserved and will be appointed to by the pointer saved with the name of the variable; and expression takes a value from memory and makes a calculation with the operation

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

bacon = 22

bacon + 1

bacon still has the value 22

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

'spam' + 'spamspam'

'spam' \* 3

‘spamspamspam’

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

we cannot use a numeric value as an assignment, because otherwise the Python interpreter will see it as an assignment to an assignment eg. 100 = 2

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

both can be used using ‘int’ or ‘round’

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

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

‘invalid syntax’; the Python interpreter is trying to add numeric value 99 to string values. In order to make it work use quotes: ‘99’ to concatenate