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

\* = multiplication symbol used to perform multiplication (ex 3\*2)

'hello' = string object

-87.8 = float number

- = minus symbol used to perform subtraction (ex 3-2)

/ = division symbol used to perform division (ex 12/6)

+ = plus symbol used to perform addition (ex 6+5)

6 = Integer number

2. What is the difference between string and variable?

Variable is built to hold data, for example spam = 10, string is a data type that can be assigned to a variable for example spam = “spam”.

spam

'spam'

3. Describe three different data forms.

Float number, integer number, string

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

An expression is a combination of variables. +,-,/,\*,>,<

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

Declaration involves assigning a value to a variable, expression performs a function for example

a = 5 is a declaration

a + 5 is an expression

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

bacon = 22

bacon + 1

It contains 22.

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

'spam' + 'spamspam'

'spam' \* 3

It will be 'spamspamspam'.

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

In eggs we can assing a value (ex 100). 100 is considered a number in python and cannot be used for assigning a value to 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?

A = 5

int(a) 🡪 converts it to an integer

float(a)🡪 converts it to a float

str(a) 🡪 converts it to a string

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

'I have eaten ' + 99 + ' burritos.

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

Cannot perform addition of strings and numbers. In order to fix it we need to add quotes

‘’’’ to 99. The correct way would be

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