1. In the below elements which of them are values or an expression? eg:- values can be integer or string and expressions will be mathematical operators.

\* - multiplication (expressions )

'hello' - string

-87.8 - float

- subtraction (expressions )

/ division (expressions )

* addition (expressions )

6 - integer

**Operators: +, -, \*, /  
Values: 'hello', -88.5, 5**

2. What is the difference between string and variable?

**string is a value representing text. A variable is a name that can refer to any value. quotes, double or single, are used to create string literals, the quotes are there to indicate that the text that they enclose is not code, it is a value**

3. Describe three different data types.

**Int,complex, float, list tuple, range,str,set**

4. What is an expression made up of? What do all expressions do?

**An expression is a combination of values, variables, operators, and calls to functions. Expressions need to be evaluated. If you ask Python to print an expression, the interpreter evaluates the expression and displays the result.**

5. This assignment statements, like spam = 10. What is the difference between an expression and a statement?

**An expression evaluates to a single value. A statement does not. We can use statement like print statement**

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

bacon = 22

bacon + 1

**bacon variable contains 23**

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

'spam' + 'spamspam' --- **Both expressions evaluate to the string** 'spamspamspam'

'spam' \* 3 --- B**oth expressions evaluate to the string 'spamspamspam'**

8. Why is eggs a valid variable name while 100 is invalid?

**The expression causes an error because 99 is an integer, and only strings can be concatenated to other strings with the + operator. Variable names cannot begin with a number**

9. What three functions can be used to get the integer, floating-point number, or string version of a value?

**The int(), float(), and str() functions will evaluate to the integer, floating-point number, and string versions of the value passed to them.**

10. Why does this expression cause an error? How can you fix it?

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

**solution - 'I have eaten ' + str(99) + ' burritos'**