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.

\*

'hello' = values

-87.8= values

- (expression)

/ (expression)

* (expression)

6 = values

2. What is the difference between string and variable?

Variables are symbols that you can use to store data in a program. You can think of them as an empty box that you fill with some data or value. Strings are data, so we can use them to fill up a variable. Declaring strings as variables can make it easier for us to work with strings throughout our Python programs.

3. Describe three different data types.

A. Integer ( The INTEGER data type stores whole numbers. They can be positive, negative, or zero. )

B. List (A list is an ordered data structure with elements separated by a comma and enclosed within square brackets.)

C. Dictionary ( Dictionaries are used to store data values in key:value pairs)

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

Expression is made up of values, containers, and mathematical operators (operands) e.g

     a = 2 + 3     and expressions are used to evaluate the values or represent the result on the screen.

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

An Expression always evaluates to a value. And, A statement does something, like creating a variable or displaying a value, it only does whatever the statement says.

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

bacon = 22

bacon + 1

23

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

'spam' + 'spamspam' ='spamspamspam'

'spam' \* 3 ='spamspamspam'

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

we can't start giving variable an integer name. if we, we should begin with, a string-like alphabet name then integer. e100 or eggs100 is valid

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

 str(), int(), float()

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

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

99 is an integer it cannot be concatenated with strings, if we have to concatenate it we need to do typecasting.