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.

\* - expressions

'hello' - values

-87.8 - values

- - expressions

/ - expressions

6 - values

2. What is the difference between string and variable?

Variable is an entity that can store any form of information eg. String, integer or group of elements. Where as string is a specific data type that can hold value of character type or group of characters.

3. Describe three different data types.

There are multiple data types present in any coding language for eg.

> STRING: The string is a sequence of characters. Python supports Unicode characters. Generally, strings are represented by either single or double-quotes

> LIST: List is an entity which can hold types of data. Formally list is an ordered sequence of some data written using square brackets ([]) and commas (,).

> TUPLE: The tuple is another data type which is a sequence of data similar to a list. But it is immutable. That means data in a tuple is write-protected. Data in a tuple is written using parenthesis and commas.

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

 Expression is a combination of operators and operands that is interpreted to produce some other value. Expression is evaluated as per the precedence of its operators.

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

Expressions can be assigned or used as operands, while statements can only be declared.

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

bacon = 22

bacon + 1

bacon = 22 (since the bacon value is not stored again in the same variable other wise it would have been 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?

In programming language the variable can not start with integer.

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

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

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

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

We are trying to concatenate different data types, one of interger and other string.

Error can be fixed by converting “99” as sting data type using astype() in python