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

: Expressions

6 : Values

2. What is the difference between string and variable?

* String : Strings are basically a data type which contains texts written in single or double quotes.
* Variables : Variables basically contains different data types like strings, float , int etc. For eg different data types are assigned to variable like

Name = “Aniket”

Name : Variables

“Aniket” : Strings

1. Describe three different data types.

* Integers : It is the whole numbers without any decimals. Represented as int.
* Floats : float contains real numbers represented float.
* Strings : Strings contains sequence of text represented in quotes.

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

* Expressions consist of variables, operators, functions & constants . Expressions basically help to calculate, manipulate & evaluate a result.

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

* “spam = 10 “ : This whole code is statement where operation is perform to get the result .
* Whereas, value 10 & operator ‘=’ is assignment. Where 10 is assigned to variable

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

bacon = 22

bacon + 1

Answer : 22

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

'spam' + 'spamspam' : ‘spamspamspam’

'spam' \* 3 : ‘spamspamspam’

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

* Rules of identifier is that it can start with Alphabets ABC, abc or abc\_ or abc100. But it cannot start with the numbers. Hence 100 violates the rule as it start with number. Whereas, eggs is a valid variable.

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

* integer : int ()
* float : float ()
* string : string ()

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

* 'I have eaten ' + 99 + ' burritos.'
* You cannot concatenate the string with the integer. You can concatenate the string with string

We can fix it by adding quote to the int 99

'I have eaten ' + ‘99 ‘+ ' burritos.'