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.

\* : Expression

'hello' : String

-87.8 : Float

- : Expression

/ : Expression

* : Expression

6 : Integer

2. What is the difference between string and variable?

Here string can be defined as a data type whereas variable is one which can be of any type as we define and we can store values (of any type) in it.

3. Describe three different data types.

Integer: This is the data-type which can hold the numeric data only without decimal points.

Float: This is also a data-type which can hold the numeric data only with decimal points.

String: This is the data-type which can hold the data of string literals or also the data which is enclosed in the quotes.

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

Expression is made up of values (Can be numeric but in python we can also use the expression with strings) and operators (Like \*,+,-..etc).

With these expressions we can compute the values with help of operators and get the desired outcome.

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

Here statement like spam = 10 from this we are not getting any outcome or results, where is we do 10 \* 10 this an example of an expression from which we can get the 100 as a results.

So the difference is from expression we can get the results and with statement we don’t.

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

bacon = 22

bacon + 1

Output: 23

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

'spam' + 'spamspam' = Output: ‘spamspamspam’

'spam' \* 3 = Output: ‘spamspamspam’

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

Here in eggs which denotes a valid name for an identification of a values and in which we can store the data and then also can be used in the expressions or can retrieve the values from.

Also with eggs we can assign the value as eggs =100. Or any.

Whereas with 100 we cannot define it as a variable as it’s a continuous numerical values.

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

int()

float()

str()

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

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

Here we are concatenating the string with numeric values due to which it can cause an error as we cannot concatenate the string with numeric.

To rectify this we need to convert the 99 to string as below:

'I have eaten ' + str(99) + ' burritos.'

Or

'I have eaten ' + ‘99’ + ' burritos.'