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'

-87.8

-

/

6

Ans:

values – 'hello',6, -87.8

expression - \* , - , / +

2. What is the difference between string and variable?

String is one of the datatypes used to store a variable. Variable is basically a value which we want to reserve a memory location.

3. Describe three different data types.

String , Numbers , list, tuples, dictionary

Numbers – can be used to store numeric values like integers, floating , complex numbers etc

String – can be used to store group of characters

List – can be considered as a container which stores group of objects separated by comma.

Dictionary – has a key value pair combination and can also be used to store group of objects but in key value pair

Tuples – similar to list and the difference is they can’t be modified once initialized.

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

Expressions are made up of operators and they are used to evaluate the value or end result

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

Expression is used to evaluate any value all the time where are statement is used to state the value or initialize the variables with values like spam =10 here is initializing spam variable with value of 10 where as expressions like spam = 10+20 means it is doing addition here and getting the end result stored in spam.

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

bacon = 22

bacon + 1

its value will be 22 and will not change as we did addition but didn’t store it back in the variable baccon

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?

Variable names should not be with numbers and we have some pre defined instructions to be followed to name the variables

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

Integer – int

Floating point – float

String - str

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

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

We are trying to concat the string with integer which can’t be done and we can fix by converting integer 99 to string by writing as ‘99’ or str(99).

'I have eaten ' + ‘99’ + ' burritos.'

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