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' - Value

-87.8 - Value

- -- Expression

/ - Expression

* - Expression

6 - Value

2. What is the difference between string and variable?

A. A String is some text or number with in “”, or ‘’.

A Variable is something that stores data.

3. Describe three different data types.

A. Datatypes:

Int: any integer or number without decimal values (Discrete in nature) (eg. 3)

Float: any number which is continuous (eg. 12.0)

String: Any text or number with in “” or ‘’. (eg: ‘Ramu’, ‘33’)

Boolean: True or False (True is associated with 1 and False is associated with 0)

Binary type: Memory view, bytesview

List, tuple, dictionary, sets.

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

Expression is made of Operators and variables. They do represent the value.

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

A. Spam = 10 is an expression. Whereas statement represents some action. (Eg. Print is statement which will print whatever present inside the (‘----’))

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

bacon = 22

bacon + 1

A. bacon still holds value as 22, because we didn’t store the new value in bacon variable.

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?

A. In python, variable always starts with alphabets. Other wise we will get syntax error (‘cannot assign to literal’)

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

A. int() – for Integer, float() – for Float and str() – for String

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

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

Ans. The above line contains string + int + string. Python can ‘concate’ homogeneous datatype.

‘I have eaten’ + str(99) + ‘burritos’ (Change in cast for int to str)

‘I have eaten’ + ‘99’ + ‘burritos’