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?

String is a data type and variable is used to assign a value. Variable occupies memory once value is assigned where as string value won’t have any memory assigned unless assigned to variable

3. Describe three different data types.

String, int, float

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

\*\*used to derive a mathematical relationship between two values or variables

E.g.:- 4+5

x>2

\*\*used to print values both numeric and non numeric too

“Hello”

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

\*\*expression is used to derive a mathermatical relation between two or more values/variable or simply print values

E.g.:- 4+5

“hello”

\*\*statement is used to assign values to a variable,print values and also compare them

e.g.:- print(“hello world”)

x=a+b

if x>0:

print(x)

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

bacon = 22

bacon + 1

o/p:- 22

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

'spam' + 'spamspam'

'spam' \* 3

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

\*\* as per syntax a variable name cannot be any keyword and it shouldn’t start with number. Hence eggs is a valid name where as 100 is invalid

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.'

We cannot add numbers to string values. We can use single ‘’ like below to convert 99 to string or use str() to do so like below

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

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