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?

Ans :-

A string is a datatype which contains a set of characters that can also contain spaces and numbers.String values are generally placed between double quotations.

While, as per the basic definition of variable, it is a place where we can store values. It is a reference to a particular value.

3. Describe three different data types.

Ans:-

String:-A string is a data type which contains a set of characters that can also contain spaces and numbers. String values are generally placed between double quotations.

Integer:-An integer is a data type which contains all numerical values. Integer doesn’t contain decimals or fractional values. It is basically a whole number that can be +ve, -ve or 0.

Boolean:-A Boolean is a data type which contains only two values, i.e. true and false.

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

Ans:-An expression is made up of operators and operands. Expressions provides a certain value from evaluation or any sort of calculation.

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

Ans:-spam=10

It basically means storing/assigning a value 10 in spam.

Expression means performing some tasks then providing a value after some sort of calculation or evaluation. While a statement is just an executable instruction that tells compiler what to perform.

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

bacon = 22

bacon + 1

Ans:-bacon contains 23 after running the code

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

'spam' + 'spamspam'

'spam' \* 3

Ans:-

‘spam’+’spamspam’ = spamspamspam

‘spam’\*3 = spamspamspam

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

Ans:-Because we can’t start the name of the identifiers with numbers. Identifier is basically name of package, class, interface, method and variable. Therefore we can’t start the name of the variable with numbers

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

Ans:-int(), float(), str()

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

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

Ans:- Because it can only concatenate string to string not integer. We can fix it by storing the value 99 into a variable then we can print it.

int a=99

‘I have eaten’ + a+’burritos.’