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.

\* = It is an arithmetic multiplication operator

'hello' = It is a string

-87.8 = It is a floating point number

- = It is an arithmetic subtract operator

/ = It is an arithmetic division operator

* = It is an arithmetic addition operator

6 = It is an Integer

2. What is the difference between string and variable?

ANSWER= String is a data type whereas variable is the name given to a memory location in a programme for example a= 30 , b=”this is my first assignment” here a or b are the variable .

3. Describe three different data types.

ANSWER= Three different data types are :

1.INTEGER = This value is represented by int class. It contains positive or negative whole numbers but decimal or fraction value is not considered as integer Example like 1,23,-3,-5, etc.

2. STRING= A string is a series of characters and we write string inside quote and you can use either single or double quotes. For example a=‘this is first assignment’ , b=”this is first assignment”.

3.FLOAT= It is used to represent real numbers and is written with a decimal point dividing the integer and fractional parts. For example 78.9, 565.345 etc.

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

ANSWER = An expression made up of variables , operators and method invocations, which are constructed according to the syntax of the language, that evaluates to a single value.

Variables= A variable is the name given to a memory location in a programme.

Operators = operators are special symbols that designate that some sort of computation should be performed .

Method= invoking function means to allow something to run them.

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

ANSWER = Difference between expression and a statement is an expression evaluates to a value and A statement does something .

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

bacon = 22

bacon + 1

ANSWER = bacon = 23

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?

ANSWER = Because there is a rule for defining a variable , the rule is variable name can’t start with digit.

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

ANSWER= Function for integer = int()

Function for floating-point number=float()

Function for string = str()

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

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

ANSWER = This expression causes an error because 99 is an integer and only strings can be concatenated to other strings with the + operator .

Correct way to write is = ‘I have eaten’ + str(99) + ‘burritos.’