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 are ‘hello’ and 6 and expressions are \* , - , / and +

2. What is the difference between string and variable?

Ans : A string is a value representing text . It is a data type .e.g. “iNeuron” , “100” etc .

A variable is a name that can refer to any value . A variable may be string , Int , Float or Boolean data type . e.g. a = 10 Here a is a variable which assign a value 10 which is an int .

3. Describe three different data types.

Ans : The three different data types are :

1. Numeric Data Type : The Data which has numeric value . It can be
2. Integer : It contains positive or negative whole numbers .it is represented by int class . e.g. 2 , -45 etc .
3. Floating number: it is a real number with floating point representation. It is specified by a decimal point . e.g. 1.2 , 2.25 etc .
4. complex number: it is a combination of real and imaginary numbers . e.g. 2 + 3j
5. Boolean Data Type : Data type with one of the two build in values Trues or False .
6. Sequence Data Type : It is the order collection of similar or different data types . The may be as –
7. Sting : It is a collection of one or more characters put in a single , double or triple quote .it is represented by str class .
8. List : Lists are line an array. It is a collection of different types of data . it is creating by giving square brackets .
9. What is an expression made up of? What do all expressions do?

Ans : An expression is a combination of values , variables , operators and call to functions . All expressions perform specific task and give results .

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

Ans : A statement represent an action or command . e.g. print statement

An expression is a combination of values , variables , operators and call to functions

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

bacon = 22

bacon + 1

Ans : it will contain 23 which is an int data type .

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

'spam' + 'spamspam'

Ans : ‘spamspamspam'

'spam' \* 3

Ans : 'spamspamspam'

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

Ans : A variable name must start with a letter or the underscore . It cannot start with a number . Therefore eggs is a valid variable name while 100 is invalid .

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

Ans : int() , float() and str() functions can be used to get integer , floating point or string version of a value .

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

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

Ans : Because it contains str and int data type while we can only concatenate str to str . we can fix it by converting int to str data type by putting 99 in quote as follows :

‘I have eaten’ + ‘99’ + ‘burritos.’