*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: 'hello', -87.8, 6

expressions: \* , - , / ,+

*2. What is the difference between string and variable?*

**Ans:** A string is data or information type stored in variable we define. And variable is a store of an information.

For example,

A = “I love ineuron”

Here A is variable and “l love ineuron” is string data type store in a variable named A.

*3. Describe three different data types.*

**Ans**:

1) Integer: it is represented by int class. It contains positive or negative whole numbers without fraction or decimal.

2)string: it is represented by str class. String is collection of one or more characters put in a single or double quote.

3)list: the list contains data of different types. The items stored in list is separated by comma and enclosed in a square bracket [].

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

**Ans***:* Expression is made up of operators and operands. An expression is kind of instruction the combines values and operator and gives single value as output of the expression.

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

**Ans:** Expression represents something such as number, string, etc. Statement is doing something with expression, such as assignment to a variable or function call is a statement. Any value contained in that statement in an expression.

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

*bacon = 22*

*bacon + 1*

**Ans*:*** *The value 23*

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

*'spam' + 'spamspam'*

*'spam' \* 3*

**Ans:** *'spamspamspam'*

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

**Ans:** A variable name must start with letter of underscore, also it cannot start with a number. That the reason eggs is a valid 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 () function can be used to get integer value of a given value.

float () function can be used to get floating point number of a given value

str () function used to get the string version of the values passed.

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

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

**Ans:** str can only be concatenate with str and not with other data type.

Here 99 is other data type i.e int data type, here we can convert int data type to str data type to get error free output.

“I have eaten’ + ‘99’ +’burriots.

can only concatenate str (not "int") to str