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

**Answer:**

From the above,

‘hello’ is a string.

\*,-,/,+ are operators

-87.8 is a float type and 6 is an Integer.

2. What is the difference between string and variable?

**Answer:**

String is Unicode character and it is an array

Variable is used to assign data types and it is reference to an object.

3. Describe three different data types.

**Answer:**

1. Numeric data type means which contains numerical. They are integer, float and complex numbers. Ex : 6,11.2,45 + 5j
2. Sequence type is ordered collection of similar or different data types. It allows us to store multiple values in an efficient and organized form. Ex : String, List and tuple.
3. Boolean type is one of the two built in values, True or False.

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

**Answer:**

It is combination of operators and operands that is inferred to produce some other value.

Arithmetic expressions/operators : It is a combination numerical values, operators and sometimes parenthesis also. The result of this expression is also a numeric value. The operators are like addition, subtraction, multiplication and etc.

Ex : 2 + 3, 3 – 2, 2 \* 3, 2/3

Logical operators:

Relational

Bit wise operators.

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

**Answer:**

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

bacon = 22

bacon + 1

**Answer:**

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

'spam' + 'spamspam'

'spam' \* 3

**Answer:**

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

**Answer:**

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

**Answer:**

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

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

**Answer:**