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.

\* : Expressions

'hello' : Values

-87.8 : Values

- : Expressions

/ : Expression

* : Expression

6 : Expression

2. What is the difference between string and variable?

String: String is a primitive data type which is the sequence character. In program we define string in either single quote (‘’) or double quote (“”) or triple quote.

Variable: Variable is used to store the data, Data may be of different type as int, string, Boolean. And a variable can hold only single data at a time.

3. Describe three different data types.

Python have six standard data type:

1. Numeric
2. String
3. List
4. Tuple
5. Set
6. Dictionary

Numeric: Numeric data type represent the data which has a numeric value. These values are defined as int, float and complex classes.

String: The string is sequence of Unicode characters. String will be in single quote, double quote or triple quote.

List: List is mutable data type in which it may not or may consist different type of elements, separated by comma inside the square brackets [].

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

Expression : Expressions are combination of operators and operands. Ex 7+5-3\*9 / 2 is expression.

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

Expression : Expressions are combination of operators and operands. Ex 7+5-3\*9 / 2 is expression.

Statement : A statement is a unit of code that has an effect, like creating a variable or displaying a value. When we type a statement, the interpreter executes it, which means that it does whatever the statement says. In general, statements don’t have values.

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

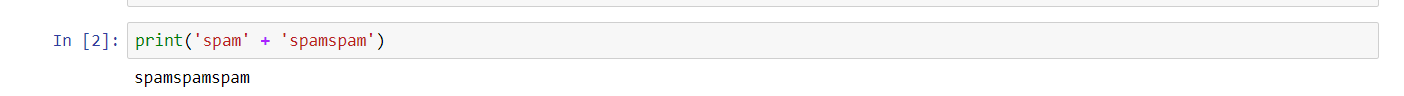
bacon = 22

bacon + 1



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

'spam' + 'spamspam'



'spam' \* 3



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

eggs are a valid variable name since its follow the rule for declare the variable while 100 is invalid since its numeric. 100 is invalid but name100 is valid variable name.

Before declaring a variable, we must follow the given rules.

1. The first character of the variable can be an alphabet or (\_) underscore.
2. Special characters (@, #, %, ^, &, \*) should not be used in variable name.
3. Variable names are case sensitive. For example - EGGS and eggs are two different variables.
4. Reserve words cannot be declared as variables.

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

Int(), float(), str() are function are used to get the respective version on values.

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

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

Error caused due to the type casted since 99 is int so we have to convert this to string.

Graphical user interface, text, application, email

Description automatically generated