**Types, Variables And Expressions:**

**Solution 1.**

We Should keep the source code lines shorter than 80 characters long.

Make a proper amount of indentation and choose the split so that the first symbol on the continued line is not the one which normally starts a statement.

**Solution 2.**

When you don't want the user to input any data and change values of variables.

And also to check whether the program is working fine.

**Solution 3.**

**i)** The four binary infix operators are:

1. Addition (+) plus
2. Subtraction (-) minus
3. Multiplication (\*) - asterisk
4. Division (/) - forward slash

* And - can also be used as the unary prefix operators ,plus and minus resp.

**ii)** Output - -3.

**iii)** Output - 2.

**iv)** Output - 4.50000.

**v)** Output - 7.

**vi)**  Output - 2. As in java we have left to right associativity.

**Solution 4.**

**i)** Double is a class that comes in java . Inside Double there is a method called parseDouble(). This method takes a text data String given to it in brackets and converts it into a double and returns the number.

**ii)** Integer is a class that comes in java. Inside Integer there is a method called

parseInteger(). This method takes a text date String given to it in brackets and converts it into an integer and returns the number.

**Solution 5.**

**i)** The value which we are assigning must have a type which matches the type of variable.

**ii)** Literal value is a constant. Example of Integer literal, 4.

**Solution 6.**

The Assignment Statement has a variable on the left side of the =(equals ) and expression or literal value on the right side.

**Solution 7.**

**i)** int, double, float.

**ii)** here 51 is an integer literal while “51” represents a String.

**iii) “**1234.5” and “1234.5”.

**iv)** Escape sequences are a set of characters to signal an alternative interpretation of a series of characters.Use backslash \”.

**v)** 2, 3, 4.

**vi)** The type double is called double because it stores numbers with double precision.

**Solution 8.**

**i)** A variable has a name, type, value and memory address.

**ii)** We declare a variable by name and its type.

Date type and then name.

**iii)** double x = 123.4;

**iv)** 5.000000 which is with double precision, but if x would be int

Then 5 would be output.