**Question A**

Your goal for this question is to write a program that accepts two lines (x1,x2) and (x3,x4) on the x-axis and returns whether they overlap. As an example, (1,5) and (2,6) overlaps but not (1,5) and (6,8).

**Answer :-**



In this program, the doSegmentsOverlap method takes four integers representing the endpoints of two line segments, (x1, x2) and (x3, x4), and returns true if they overlap and false if they do not.

The main method provides sample input values and checks if the line segments overlap. This program will output whether the two line segments overlap or not based on the input values provided in the main method.

Using TDD approach, all test cases are defined in LineSegmentOverlapTest.java. (available in github)