Create a table edge(src, dest, weight), with all data types as int, which represents a graph.
Then load the sample data provided below.

i. Write a program to define a relation reachable(node), which contains all nodes reachable from node 0, using JDBC, but based on the procedural SQL pseudo code given in the book (a copy is provided on moodle). Ignore the edge weight field for this program.

ii. Next, create a version of the above program which calculates the shortest path relation reachableC(node, cost), as follows: in each iteration,

1. compute new paths with cost by modifying the previous program, and add the new paths to the reachableC relation.
2. Then, use aggregation to remove all paths that are not minimum cost.

Don't worry about complexity. Submit a single java file which contains functions to compute both the above relations, and a main program that calls both the functions.

Note: Make sure the top of the file has your roll number and name.

Sample data

```
insert into edge values
 (0, 1, 2),
 (0, 2, 6),
 (1, 2, 3),
 (1, 4, 5),
 (2, 0, 7),
 (2, 3, 5),
 (3, 4, 8),
 (3, 6, 2),
 (4, 5, 3),
 (5, 6, 11),
 (6, 5, 1),
 (6, 7, 9),
 (7, 8, 5),
 (8, 8, 3),
 (8, 1, 6),
 (9, 4, 3),
 (9, 10, 3),
 (10,11,5),
 (11, 9, 3);
```