

```

class Graph{
    boolean[][] adjMat;
    int numNodes;

    Graph getTransitiveClosure(){
        boolean [][] adjMatCopy = new boolean[numNodes][numNodes];

        for(int k=0;k<numNodes;k++){
            for(int i=0;i<numNodes;i++) {
                for(int j=0;j<numNodes;j++){
                    if(adjMatCopy[i][k] && adjMatCopy[k][j]) {
                        adjMatCopy[i][j]=true;
                    }
                }
            }
        }

        return newGraph(adjMatCopy,numNodes);
    }
}

```