## Part 3

## **Creating Graph and Counting Edges**

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```
package twitterExtractor;
//All required imports
import java.sql.ResultSet;
import java.sql.SQLException;
import java.sql.Connection;
import java.sql.DriverManager;
import java.sql.Statement;
import java.util.Arrays;
import edu.uci.ics.jung.graph.SparseGraph;
import twitter4j.*;
import twitter4j.conf.*;
import twitterExtractor.TweetListener2;
public class GraphJava {
public static void main(String[] args) throws Exception {
Connection conn =
DriverManager.getConnection("jdbc:mysql://localhost/twitter?useUnicode=yes&ch
aracterEncoding=UTF8&" + "user=root&password=root");
            processTweets(conn);
public static void processTweets( Connection conn) throws Exception {
SparseGraph<String,Edge> graph =new SparseGraph<String,Edge>();
Statement stmnt = conn.createStatement();
ResultSet reset = stmnt.executeQuery("SELECT text FROM tweet LIMIT 10");
      while (reset.next()) {
            String text = reset.getString("text");
          String[]words = text.split(" ");
            for(int i=0;i<words.length-1;i++) {</pre>
                  for(int j=i+1;j<words.length;j++) {</pre>
                        String w1=words[i];
                      String w2=words[j];
                      if(w1==w2) {
                        continue;
                      if (!graph.containsVertex(w1)) {
                        graph.addVertex(w1);
                      if (!graph.containsVertex(w2)) {
                        graph.addVertex(w2);
```

```
Edge e = graph.findEdge(w1,w2);
                      if(e==null){
                        e=new Edge();
                        graph.addEdge(e,w1,w2);
                      }else{
                        e.weight +=1;
                     }
                 }
      }
      System.out.println("Total Number of Edges: " +graph.getEdgeCount());
}
}
public class Edge {
public int weight =1;
public Edge() {
}
}
```

Total Number of Edges: 1137