# Erdos Number

* How to run
  + Compile: $ javac Main.java
  + Run: $ java Main
* Data Structure
  + Used HashMap to save a graph
    - Key: (String) authors’ names
    - Value: (HashSet<String>) author’s connections
  + Used HashMap to save each author’s erdos number
* Algorithm Steps
  + Initial Graph by parsing string from input - paper database
    - Use regular expression to parse author names
  + BFS to count erdos numbers for all authors and save to HashMap
  + Use “for” loop to print out results that saved on HashMap