# Program #4 - graphs are wild

Prof Bill - Apr 2020

Program #4 logistics:

- Due: Mon Apr 20, 2020 at the beginning of class
- Worth: 6 points (6% of your grade)
- Learn: graphs, graph algorithms

## 1. Description

Read a graph. Determine the min spanning tree. Write your results.

Or something else. In our last program, graphs are wild. thanks... yow, bill



### 2. Design discussion

We need a graph representation and file format. Sedgwick is a great help here!

Run faster:

- 1. Read a graph file
- 2. Determine min spanning tree using Prim's or Kruskal's
- 3. Write your results (another graph?)

Or, choose the **graphs are wild** option: Get a team together and do some other graph-y things: draw graph with JavaFX, generate (large) random graphs, Dijkstra shortest path, is graph bipartite, determine if two graphs are the same (isomorphic), etc.

#### 3. Requirements

Program #4 requirements are:

- ➤ Write your program in Java.
- I will only accept quality code: <u>Java coding guidelines</u>.

#### 4. Grading

Create a **Github repo** with program 4, so that I can peek at your code. Your repo should include:

- All your Java source files
- A **README.txt** (or README.md) file...that follows my template

Remember our **plagiarism** guidelines as well. Getting help from google or stackoverflow or a friend is OK, but:

- 1. You must acknowledge any help you receive with a comment in your code.
- 2. You must understand any code in your solution.
- 3. Get help on program components, not the assignment (tic tac toe philosophy).
- 4. Questions about this...contact me **before** you turn in your work, not after.

thanks... yow, bill