**Main**

Open files

Read map file, store in weighted adjacency matrix

Read pilot file

For each line, check if pilot’s route is valid, and determine the total weight

Store this in a Patrol object in an arraylist to be sorted and printed later

Sort pilots by weight

Print pilot’s name, weight, valid/invalid in sorted order

Close files

**Sort**

**Parameters – ArrayList<Patrol> (Patrol contains pilot name, weight, and valid/invalid)**

**Return – nothing**

Use a bubble sort on patrol ArrayList sorting by path weight

**GetPatrol**

**Parameters – String line, map adjacency matrix**

**Return – Patrol**

Given a pilot route file line as input

parse the string for pilot name and points along route

traverse along map:

check validity of route and find path weight simultaneously

return a Patrol object with the correct pilot name, weight, and validity