## Summary

- We want to develop a JUnit test for most of the functionality of program 4
  - Two constructors
  - getNumberOfVertices()
  - getNumberOfEdges()
  - addVertex()
  - addEdge()
  - isDirected()
  - toString()
  - isConnected()
  - Exceptions

## Tests

- Two constructors
  - Test via checking if isDirected() is correct, three tests
- getNumberOfVertices()
  - One test, add a bunch of vertices
- getNumberOfEdges()
  - One test, add a bunch of edges
- addVertex()
  - One test, add a bunch of vertices, with duplicates
- addEdge()
  - One test, add a bunch of edges, with duplicates
- isDirected()
  - Covered by constructor tests
- toString()
  - One test, add vertices and edges
- isConnected()
  - Four tests, two per directed/undirect, one of each connected/not connected
- Exceptions
  - Five tests, one for each exception type, and one for non-exception