## CSc 110, Autumn 2016

## Lecture 28: 2D Structures

Adapted from slides by Marty Stepp and Stuart Reges


## What is the right structure?

- You want to store a bunch of colors so you can later choose one at random.
- Batting order of a baseball team.
- Students names and their grades on a project.
- Friends names and their phone numbers
- Height, width and location of a sports field.
- Movies a person has watched.
- Items in a shopping cart.
- A student's grades.


## What is the right structure?

- The grades for all students in a class
- All books in a store arranged by category
- Many recipes each containing many steps
- Phone numbers that have been called this month on a phone plan divided by area and country code for billing simplicity


## Exercise

- Write a program that allows a user to ask the distance between two friends.
- If person 1 and person 2 are friends then they are distance 0
- If person 2 is friends with a friend of person 2 they are distance 1
- What structure is appropriate for this problem?

