Jithub APCS1 pd 4
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Final Project Proposal

Topher Flip

This is a minesweeper-esque game borrowed from the Pokemon HeartGold and SoulSilver called "Voltorb Flip". There is a **5x5 board** with tiles facing down. Under each tile is either a Topher (aka a mine) or a 1, 2 or 3. The objective is to gain points, and the player does that by **flipping the 2 and 3 tiles** (the points are multiplicative, so there is no point gained from flipping a 1). Flipping a **Topher results in an immediate game over.** The objective is to flip all the 2s and 3s on the board to advance to the **next level**, which has a higher difficulty. If a Topher is flipped early on in the round, aka when less than two 2s or 3s have been flipped, the player will fall a level. Otherwise, if the player flips a Topher, he will have to replay the same level. The difficulty increases not with more Tophers on the field, but with more available points. On one end of each array, the total **number of points and Tophers are shown as hints.**

Sequence of events:

- The player will be given the option to play the game once woo.java runs.
- The player will be shown the arrays, and have the option to select a specific tile, named after a letter in the alphabet.
- The player will have an option to either a) flip or b) take notes.

>>> enter your coordinate:
>>> k
>>> choose your actions: 1. Flip 2. Take notes
>>> 2
>>> enter your note:
>>> might be a topher
>>> Your notes (so far) :
A: must be 2
O: prob 1
K: might be a topher

This game will implement various topics covered in class, the most obvious being interaction between several **classes** and uses of **arrays**. Aside from the driver file, there will be two main classes named Display and Value. The Display class will contain an ArrayList of type String that when printed in the terminal, will display your set of tiles for that game. The coordinates of each tile will correspond to the value of that tile in an ArrayList of type Integer (with the same size and shape of the Display ArrayList) with the same coordinates. When a tile is "flipped", the value of the tile will replace its letter. A second and third ArrayList (both of type Integer) will also be located in the Display class to be printed which will indicate the number of possible points and Tophers present in the given row/column.