

For farkle hw3 I did all the requirements except for #4. This assignment has all the requirements of the previous farkle assignments, which includes a single player game of farkle that abides by the ruleset and combo scoring of farkle. I've added a point limit, which the player sets before the game starts. I implemented this by asking for an input and setting the main game while loop to run as long as the users total points are below the threshold. I also added the full house combo, I checked if 6 dice are added to the meld before checking for the full house to decide if the user wanted 2 triples and a hot hand, and if the user added 5 then we check the full house so the user is pointed for the full house and not a single triple. Then I added the tests, which test for a full house, straight, and three pairs combo, then I tested for a farkle by adding 6 zeros into the meld, and lastly checked for the correct output for naming the user. For testing a farkle I added six 0's to my meld and called my checkFarkle function and asserted that farkle would be true which is what we'd expect.

I specifically had troubles with the incorporation of a point limit, because I had to add the addition of multiple rounds being played, and my logic with the scoring system was wrong. When a player rolled a farkle, instead of setting the round score to 0, it actually appended a 0 into the score arraylist, so when I would set the score at the round's position, it would set the wrong index. I fixed it by adding a score of 0 at the end of a turn, then when I edit the score, I used set to change the score of that turn to whatever it was supposed to be. I added a score of 0 because I was having segmentation faults because the arraylist was trying to set at a position that didn't exist.

In retrospect I would've started the assignment earlier and included the multiplayer aspect of the assignment. Unfortunately I waited until halloweekend and found no motivation to do it during the weekend.

```

*****
*                               Zag Farkle by Cody Kesselring!
*                               Copyright: 2023
*****

```

```

Meld hand:  3  0  0  0  2  0
Die side up: 1  2  3  4  5  6
-----
Current hand: 4  0  0  0  0  0
Index:       A  B  C  D  E  F

```

```

Enter index to add die to meld or (-1) stop adding die and calculate scoreMeld score: 0
-1
-1 -1
Leftover hand: 4  0  0  0  0  0
Score: 1500

```

This means there are 3 ones and 2 fives (full house)

```

Score: 1500

```

```

Target core: 1000

```

```

Enter -1 to end turn early and bank the points or 0 to reroll
-1

```

```

You have exceeded the point threshold!! Les goooo!

```

