

# Greed Kata

Source: <https://github.com/ardalis/kata-catalog>

## Instructions

Greed is a press-your-luck dice rolling game. In the game, the player rolls the dice and tries to earn as many points as possible from the result. For the purposes of this kata, we will just be scoring a **single** roll of **five** dice (but see Extra Credit below).

Write a scoring method that calculates the best score based on a given roll using the following set of scoring rules. Each die can only be scored once (so single die scores cannot be combined with triple die scores for the same individual die, but for instance four 5s could count as 1 Triple (500) and 1 Single (50) for a total of 550).

- A single one (100 points)
- A single five (50 points)
- Triple ones [1,1,1] (1000 points)
- Triple twos [2,2,2] (200 points)
- Triple threes [3,3,3] (300 points)
- Triple fours [4,4,4] (400 points)
- Triple fives [5,5,5] (500 points)
- Triple sixes [6,6,6] (600 points)

## Example Scores

- [1,1,1,5,1] = 1150 points
- [2,3,4,6,2] = 0 points
- [3,4,5,3,3] = 350 points

## Extra Credit

Modify your scoring method to support the following rules:

- The player may throw 1 to 6 dice at a time.
- Four-of-a-Kind [2,2,2,2]: Multiply Triple score by 2 (e.g. 4 2s = 400)
- Five-of-a-Kind [2,2,2,2,2]: Multiply Triple score by 4 (e.g. 5 2s = 800)
- Six-of-a-kind [2,2,2,2,2,2]: Multiply Triple score by 8 (e.g. 5 2s = 1600)
- Three Pairs [2,2,3,3,4,4] (800 points)
- Straight [1,2,3,4,5,6] (1200 points)

# Resources

- [Walkthrough by Steve Smith \(@ardalis\)](#)
- [Greed Dice Game \(aka Farkle\) on Wikipedia.org](#)