

Object Oriented Design

Problem

A carnival has many games that are similar in nature. These games allow the player three tries, and the player who is successful all three times is a winner. For example, the Balloon Dart Toss game allows the player to throw three darts at a wall of balloons. If each dart pops a balloon, then the player is a winner. The Ring Toss and Break a Plate games work similarly.

Every player gets a prize. There are winning prizes and consolation prizes. The Balloon Dart Toss prizes are tiger plush and sticker. The Ring Toss prizes are bear key chain and pencil, and the Break A Plate prizes are pig plush and plastic dinosaur. The Balloon Dart Toss and Ring Toss games are \$2 to play. The Break a Plate game costs \$1.50.

The player comes to the carnival with some spending money and can play games until the money runs out. The player also holds onto all the prizes won.

The Carnival application should produce output similar to the following when Shonda has \$5 spending money and Luis has \$3:

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Shonda goes to Balloon Dart Toss. Prize won: tiger plush
Luis goes to Ring Toss. Prize won: bear keychain
Shonda goes to Ring Toss. Prize won: pencil
Luis goes to Break a Plate. Sorry, not enough money to play.
Shonda goes to Break a Plate. Sorry, not enough money to play.
Shonda won: pencial, tiger plush
Luis won: bear keychain
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Create an OO design (classes, and methods) to solve the above problem.