

CIS 1600 Introduction to Programming

Dice Games Programming Project

Overview

You will now play multiple games, Boxcars and SnakeEyes, letting the user choose which game to play. In the game of Snake Eyes, you will count how many times the user rolls a pair of ones. In addition, the user has the option to simply roll a bunch of dice.

Please download and edit the starter code provided.

Programming Specifications

Organize your program into the following functions:

rollDice (num)

Code provided in the starter file.

boxcars()

Move the boxcars game logic (from Project 4) here. Remember that all code within a function must be indented. Please use an appropriately named constant to check for boxcars (12), as modeled in the Lucky Sevens case study. Add a return statement after printing the game summary. If you did not complete Project 4, place a print statement in this function to display, "Playing Boxcars."

snakeEyes (num)

Initialize a counter to keep track of the number of snake eyes (a pair of ones). Write a **for** loop to roll a pair of dice the number of times the user requests (num). Call the rollDice function to handle rolling a pair of dice. If the return value from that call is 2, then announce "SNAKE EYES" and increment your snake eyes counter. Please use an appropriately named constant to check for snake eyes (2), as modeled in the Lucky Sevens case study. Print a game summary with the snake eyes count, then return.

main()

Use a **while True** loop to continue processing user requests until they choose to exit. Display a menu with the options:

- 1 = Play Boxcars
- 2 = Play Snake Eyes
- 3 = Roll a bunch of dice

Ask the user to choose an option, or 0 to exit.

Use an **if-elif-else** statement to determine the program flow:

- If the user selects 1, simply call your boxcars function.
- If the user selects 2, ask them how many times they want to roll the dice, then pass this number to the snakeEyes function.
- If the user selects 3, ask them how many dice they want to roll, then pass this number to the rollDice function.
- If the user enters any other number, break.

Once the loop ends, thank the user for playing.

Testing

See the assignment in Canvas for screenshots from a sample run.

Documentation and Style

Insert a docstring at the top of your program with your name, the date, and a brief description of the program. Each function should begin with a docstring comment briefly describing what it does. Additional block comments should be used to identify major sections (initialization of constants and variables, play game, display summary). For readability, insert 2 blank lines after each function body.