

Rubric for COP 3330 Programming Assignment 2

Criteria	Points	Description
Part A: Die Class	30	
- Constructor Implementation	5	- Correctly implements a no-argument constructor that sets faceValue to 1.
- Private faceValue Variable	5	- The faceValue is private and stored as an instance variable.
- Getter and Setter Methods	10	- Implements getFaceValue to return the current faceValue.
		- Implements setFaceValue to set the faceValue based on an integer argument.
- Roll Method	10	- Implements roll method to randomly assign a faceValue between 1 and 6 (both inclusive) without printing anything.
Part B: Dice Class	30	
- Constructor Implementation	5	- Correctly implements a no-argument constructor that initializes two Die objects with faceValue set to 1.
- Private Die Objects	5	- Ensures the Die objects are private instance variables.
- Get Face Value Method	10	- Implements a method to return the sum of the faceValues of the two dice.
- Roll Method	10	- Implements roll method to roll both dice objects and update their faceValues.
Part C: DiceTester Class	30	
- Class Naming and Main Method	5	- Class is named correctly as lastname_firstname.java and contains a main method.
- Roll Dice 1000 Times	10	- Rolls the dice 1000 times and stores occurrences of each face value (sum of the two dice) in an integer array.
- Output of Face Value Occurrences	10	- Correctly prints the number of occurrences for face values from 2 to 12 after 1000 rolls.
- Histogram Output	5	- Correctly draws the histogram graph with proper formatting, ensuring y-axis starts from 175 and decreases by 25 to 0, with correct spacing on the x-axis.
Code Structure, Comments, and Compilation	10	
- Code Organization and Structure	5	- Code is well-structured, follows object-oriented principles, and adheres to best practices in organization and naming.
- Comments and Readability	3	- Code includes comments explaining the logic and is easy to read.
- Compilation	2	- Code compiles without errors.

*Late will get 0.85 of the grade