

Objectives:

As a programmer, you will be expected to understand good coding practice and logical structures. For this project **you**

must show mastery of:

- Proper code layout
- Variable declaration and initialization
- Proper library importing
- Constant declaration and initialization
- Collections (arrays)
- Method overloading
- Anonymous object
- Modularization
- Dispatching
- Program sequence, selection, & looping
- Cohesion
- Input validation/sanitization
- Good programming practices

Lab 4

All of the chapter exercises plus:

Write a program that accepts a die type, number of dice, and target number.

- Valid die types are: 4, 6, 8, 10, 12, 20, 100
- Max number of dice: 10
- Min & max target numbers: 5 & 30

Roll the dice. Each die is a separate attempt at the target number with the following caveats:

- If more than 50% of the dice are ones, the result is a bust and the roll fails.
- If any of the results are the same as the die type, that individual result is open ended, and another dice is rolled and added to the first result. This can happen multiple times.

You will have to use Java random.

