

CS101: Lab #5
Using Classes and Objects Part II

1. Write a program that computes the area of each color in an archery target. For simplicity, we will consider a simple circular archery target consisting of the colors (in order from inside to outside): yellow, red, blue, black, and white. We also assume that each color in the target is equal 'width'.

You must prompt the user for a radius (in cm) of the entire target and report the following information:

- a. The area of each colored section. Output only four decimal places.
- b. The percentage (using `DecimalFormat`) of each colored section (compared to the area of the entire target).

You must output the information, in color order, according to the following example.

The color yellow has area 3.1416 cm² with 4% of the total area.



2. Write a program that takes an input integer from the keyboard by autoboxing to an `Integer`. Then the program outputs the binary, octal, and hexadecimal representation of the input integer. Your output should clearly indicate the specific base of the number.

Your program may use only a single `Integer` object (no `int`).