

Lab # 4

Q1: Design a class named Fan to represent a fan. The class contains:

- * Three constants named SLOW, MEDIUM, and FAST with values 1, 2, and 3 to denote fan speed.
- * A private int data field named **speed** that specifies the speed of the fan (the default is SLOW.)
- * A private boolean data field named **on** that specifies whether the fan is on (the default is false.)
- * A private double data field named radius that specifies the radius of the fan (the default is 5.)
- * A string data field named color that specifies the color of the fan (default is blue.)
- * The accessor and mutator methods for all four data fields.
- * A no-arg constructor that creates a default fan.
- * A method named toString() that returns a string description for the fan. If the fan is on, the method returns the fan speed, color, and radius in one combined string. If the fan is not on, the method returns the fan color and the radius along with the sting "fan is off" in one combined string.

Write a test program that creates two Fan objects. Assign maximum speed, radius 10, color yellow, and turn it on to the first object. Assign medium speed, radius 5, color blue, and turn it off to the second object. Display the objects by invoking their toString method."

Sample run

```
speed 3
color yellow
radius 10.0
fan is on
speed 2
color blue
radius 5.0
fan is off
```