Progressive Education Society’s

**MODERN COLLEGE OF ENGINEERING, Pune -05.**

(An Autonomous Institute Affiliated to Savitribai Phule Pune University)

MCA Department

**PRACTICAL SUBMISSION RECORD- A.Y. 2024-25**

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| **Class: FYMCA Div: A**  **Semester: II** | **Course Code: MCA01554**  **Course Name: Java Programming Laboratory** | | **Batch: F2** |
| **Name: Pranav Raju Malwatkar** | | **Roll No: 51037** | |
| **CO No: CO515.2** | | **Assignment No: 4** | |

**Program Title: 4) Write a program that simulates a traffic signal light with short delay between states.**

**Program Code:**

import java.io.\*;

import java.lang.\*;

import java.applet.\*;

import java.awt.\*;

import java.awt.event.\*;

public class java4 extends Applet implements ActionListener, Runnable {

Thread t;

Button b1, b2;

Boolean red, yellow, green;

public void init() {

t = new Thread(this);

red = true;

}

public void start() {

red = true;

b1 = new Button("Start");

b2 = new Button("Stop");

add(b1);

add(b2);

setSize(1000, 1000);

setVisible(true);

b1.addActionListener(this);

b2.addActionListener(this);

}

public void actionPerformed(ActionEvent ae) {

Object ob = ae.getSource();

if (ob == b1) {

t.start();

} else if (ob == b2) {

t.stop();

}

}

public void run() {

try {

while (true) {

if (red == true) {

red = false;

yellow = true;

green = false;

} else if (yellow == true) {

red = false;

yellow = false;

green = true;

} else if (green == true) {

red = true;

yellow = false;

green = false;

}

repaint();

t.sleep(1000);

}

} catch (Exception e) {

System.out.println(e);

}

}

public void paint(Graphics g) {

if (red == true) {

g.setColor(Color.RED);

g.fillOval(100, 100, 100, 100);

} else if (yellow == true) {

g.setColor(Color.YELLOW);

g.fillOval(100, 200, 100, 100);

} else if (green == true) {

g.setColor(Color.GREEN);

g.fillOval(100, 300, 100, 100);

}

}

}

**Output:**

