

```
import java.util.Scanner;
```

```
class AttendancePredictor {
```

```
    private String name;
```

```
    private String roll;
```

```
    private int totalClasses;
```

```
    private int attendedClasses;
```

```
    private int upcomingClasses;
```

```
    private double minimumPercentage;
```

```
    public AttendancePredictor(String name, String roll, int totalClasses,  
                               int attendedClasses, int upcomingClasses,  
                               double minimumPercentage) {
```

```
        this.name = name;
```

```
        this.roll = roll;
```

```
        this.totalClasses = totalClasses;
```

```
        this.attendedClasses = attendedClasses;
```

```
        this.upcomingClasses = upcomingClasses;
```

```
        this.minimumPercentage = minimumPercentage;
```

```
    }
```

```
    public double getCurrentPercentage() {
```

```
        return (attendedClasses / (double) totalClasses) * 100;
```

```
    }
```

```
    public double getPredictedPercentage() {
```

```
        int futureAttended = attendedClasses + upcomingClasses;
```

```
    int futureTotal = totalClasses + upcomingClasses;
    return (futureAttended / (double) futureTotal) * 100;
}
```

```
public int getRequiredToReachMinimum() {
    int futureTotal = totalClasses + upcomingClasses;
    double required = (minimumPercentage * futureTotal / 100.0) - attendedClasses;
    return (int) Math.ceil(Math.max(required, 0));
}
```

```
public int getBunkableClasses() {
    int count = 0;
    int currentAtt = attendedClasses;
    int total = totalClasses;

    while (true) {
        double percentage = (currentAtt / (double) total) * 100;
        if (percentage < minimumPercentage)
            break;
        total++;
        count++;
    }
    return count - 1;
}
```

```
public String getStatus() {
    double current = getCurrentPercentage();
    if (current >= minimumPercentage)
```

```

        return "SAFE ✅";
    else if (getPredictedPercentage() >= minimumPercentage)
        return "CAN BE SAFE IF YOU ATTEND ALL UPCOMING CLASSES ⚠️";
    else
        return "AT RISK / DETAINED ❌";
}

public void printReport() {
    System.out.println("\n===== ATTENDANCE REPORT =====");
    System.out.println("Student Name: " + name);
    System.out.println("Roll Number: " + roll);
    System.out.println("-----");
    System.out.printf("Current Attendance: %.2f%%\n", getCurrentPercentage());
    System.out.printf("Predicted Attendance (If attend all): %.2f%%\n",
getPredictedPercentage());

    System.out.println("Required Classes To Reach Minimum: " +
getRequiredToReachMinimum());

    System.out.println("Max Bunkable Classes: " + getBunkableClasses());
    System.out.println("Final Status: " + getStatus());
    System.out.println("=====\n");
}
}

```

```

public class Main {

    public static void main(String[] args) {

        Scanner sc = new Scanner(System.in);
    }
}

```

```
System.out.println("==== COLLEGE ATTENDANCE PREDICTOR ===");

System.out.print("Enter Student Name: ");
String name = sc.nextLine();

System.out.print("Enter Roll Number: ");
String roll = sc.nextLine();

System.out.print("Enter Total Classes Conducted: ");
int total = sc.nextInt();

System.out.print("Enter Classes Attended: ");
int attended = sc.nextInt();

System.out.print("Enter Upcoming Classes: ");
int upcoming = sc.nextInt();

System.out.print("Enter Minimum Required Attendance %: ");
double minPercent = sc.nextDouble();

AttendancePredictor predictor =
    new AttendancePredictor(name, roll, total, attended, upcoming, minPercent);

predictor.printReport();
}
}
```