**Excercise7: Financial Forecasting**

**Program:**

import java.util.\*;

public class MovingAverageForecast {

public static void main(String[] args) {

// Revenue data for the last 10 months (in thousands)

int[]revenue = {12, 14, 15, 16, 18, 20, 22, 23, 24, 25};

int window = 3; // Size of moving average window

System.out.println("Forecast for next 3 months using Moving Average:");

// Forecast next 3 months

for (int i = 0; i < 3; i++) {

int sum = 0;

for (int j = revenue.length - window + i; j < revenue.length + i; j++) {

sum += revenue[j];

}

double avg = sum / (double) window;

System.out.printf("Month %d: Forecast = %.2fK\n", revenue.length + i + 1, avg);

}

}

}

**Output:**

Forecast for next 3 months using Moving Average:

Month 11: Forecast = 24.00K

Month 12: Forecast = 24.67K

Month 13: Forecast = 25.33K