# FinancialForecasting

Code :

import java.util.Scanner;

public class FinancialForecasting {

public static double[] movingAverage(int[] sales, int windowSize) {

int n = sales.length;

double[] forecast = new double[n - windowSize + 1];

for (int i = 0; i <= n - windowSize; i++) {

double sum = 0;

for (int j = 0; j < windowSize; j++) {

sum += sales[i + j];

}

forecast[i] = sum / windowSize;

}

return forecast;

}

public static void main(String[] args) {

Scanner scanner = new Scanner(System.in);

System.out.print("Enter number of months of sales data: ");

int n = scanner.nextInt();

int[] sales = new int[n];

System.out.println("Enter sales data (in units):");

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

sales[i] = scanner.nextInt();

}

System.out.print("Enter window size (e.g., 3 for 3-month average): ");

int k = scanner.nextInt();

if (k > n || k <= 0) {

System.out.println("Invalid window size!");

return;

}

double[] forecast = movingAverage(sales, k);

System.out.println("\nForecast for future months:");

for (int i = 0; i < forecast.length; i++) {

System.out.printf("Month %d forecast: %.2f units\n", (i + k), forecast[i]);

}

}

}

Output :

