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public class TracciaC{
    class Esercizio1{
        static void elabora(int[] v) {
            for (int i = 0; i < v.length; i++) {
                int s = 1;
                if (i % 2 == 1) {
                    for (int j = i + 1; j < v.length; j++)
                        s *= v[j];
                }else{
                    for (int j = i - 1; j >= 0; j--)
                        s *= v[j];
                }
                System.out.println(s);
            }
        }
        public static void main(String[] args) {
            int[] a = { 3, -2, 4, 7, 3, -1 };
            elabora(a);
        }
    }

    class Esercizio2{

        public static boolean verifica(int[] a, int x){
            for (int i = 1; i < a.length; i+=2)
                if (a[i] * a[i-1] < x || a[i] + a[i-1] > x)
                    return false;
            return true;
        }

        public static void main(String[] args) {
            int[] a = { 1, -1, 1, 1, 1, -1 };
            elabora(a);
        }
    }

    class Esercizio3{
        public static boolean verificaSomme(double[][] m){

            if (m == null || m[0] == null || m.length != m[0].length)
                return false;

            int n = m.length;
            double sr = 0;
            double sc = 0;
            double sd = 0;
            for (int i = 0; i < n; i++){
                sr += m[0][i];
                sc += m[i][n-1];
                sd += m[i][i];
            }

            if (sr == sc && sr == sd)
                return true;
            else
                return false;
        }
        public static double[] costruisceVettore(double[][] m, double k){
            double sd = 0;
            for (int i = 0; i < m.length; i++)
                sd += m[i][m.length-i-1];

            int v = 0;
            double[] temp = new double[m.length];
            for (int i = 0; i < m.length; i++){
                double s = 0;
                for (int j = 0; j < m.length; j++)
                    s += m[i][j];
                if (s > k)

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        temp[v++] = s+sd;
    }

    double[] res = new double[v];
    for (int i = 0; i < m.length; i++)
        res[i] = temp[i];

    return res;
}
public static double[][] sottomatrice(double[][] m) {
    int n = m.length/2;

    double[][] sm = new double[m.length][n];
    int x;
    if (m.length % 2 == 1)
        x = 1;
    else
        x = 0;
    for (int i = 0; i < m.length; i++) {
        int h = 0;
        for (int j = 0; j < m.length-x; j++) {
            if (i % 2 == j % 2) {
                sm[i][h] = m[i][j];
                h++;
            }
        }
    }
    return sm;
}
}
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