

```

import java.io.*;
import java.nio.charset.StandardCharsets;
import java.nio.file.Files;
import java.nio.file.Path;
import java.nio.file.Paths;
import java.util.Scanner;

public class task317 {

    //Text
    public static final String ANSI_RESET = "\u001B[0m";
    public static final String ANSI_BLACK = "\u001B[30m";
    public static final String ANSI_RED = "\u001B[31m";
    public static final String ANSI_GREEN = "\u001B[32m";
    public static final String ANSI_YELLOW = "\u001B[33m";
    public static final String ANSI_BLUE = "\u001B[34m";

    public static void main(String[] args) {

        Path ifile = Paths.get("src\\task317\\INPUT.TXT");
        Path ofile = Paths.get("src\\task317\\OUTPUT.TXT");

        try(Reader reader = new InputStreamReader(Files.newInputStream(ifile), StandardCharsets.UTF_8);
            PrintWriter writer = new PrintWriter(Files.newOutputStream(ofile), StandardCharsets.UTF_8, false) ) {
            Scanner scanner = new Scanner(reader);
            int X = scanner.nextInt(), Y = scanner.nextInt(), Z = scanner.nextInt(), W = scanner.nextInt();
            int XN = 0, YN = 0, ZN = 0;

            //Посчитаем коэф. на AN*A <= W, где A - переменная
            for (int i = 0; ZN*Z <= W || YN*Y <= W || XN*X <= W; ++i) {
                if(ZN*Z <= W) ZN += 1;
                if(YN*Y <= W) YN += 1;
                if(XN*X <= W) XN += 1;
            }

            System.out.printf(ANSI_GREEN + "Коэффициенты: " + ANSI_RESET + "XN = %d, YN = %d, ZN = %d\n", XN, YN, ZN);
            writer.printf("Коэффициенты: XN = %d, YN = %d, ZN = %d\n", XN, YN, ZN);

            System.out.printf(ANSI_GREEN + "Количество вариантов: " + ANSI_RESET + "%d\n", XN*YN*ZN);
            writer.printf("Количество вариантов: %d\n", XN*YN*ZN);

            System.out.println(ANSI_GREEN + "Перебираемые элементы:" + ANSI_RESET);
            writer.printf("Перебираемые элементы:\n");

            int sum = 0;
            for (int k = 0; k < ZN; k++){
                for (int j = 0; j < YN; j++){
                    for (int i = 0; i < XN; i++){
                        sum = i*X + j*Y + k*Z;
                        if(sum == W){
                            System.out.printf(ANSI_YELLOW + "(%2d, %2d, %2d) ", i*X, j*Y, k*Z);
                            writer.printf("(%2d, %2d, %2d) ", i*X, j*Y, k*Z);
                        }
                        else if(sum > W){
                            System.out.printf(ANSI_RED + "(%2d, %2d, %2d) ", i*X, j*Y, k*Z);
                            writer.printf("(%2d, %2d, %2d) ", i*X, j*Y, k*Z);
                        }
                        else{
                            System.out.printf(ANSI_BLUE + "(%2d, %2d, %2d) ", i*X, j*Y, k*Z);
                            writer.printf("(%2d, %2d, %2d) ", i*X, j*Y, k*Z);
                        }
                    }
                    System.out.println(ANSI_RESET);
                    writer.printf("\n");
                }
            }
            writer.flush();
        } catch (IOException e) {
            e.printStackTrace();
        }
    }
}

```

Коэффициенты: XN = 5, YN = 2, ZN = 3

Количество вариантов: 30

Перебираемые элементы:

```

( 0, 0, 0) (10, 0, 0) (20, 0, 0) (30, 0, 0) (40, 0, 0)
( 0, 25, 0) (10, 25, 0) (20, 25, 0) (30, 25, 0) (40, 25, 0)
( 0, 0, 15) (10, 0, 15) (20, 0, 15) (30, 0, 15) (40, 0, 15)
( 0, 25, 15) (10, 25, 15) (20, 25, 15) (30, 25, 15) (40, 25, 15)
( 0, 0, 30) (10, 0, 30) (20, 0, 30) (30, 0, 30) (40, 0, 30)
( 0, 25, 30) (10, 25, 30) (20, 25, 30) (30, 25, 30) (40, 25, 30)

```