

```

package com.jinglin;

import java.util.Scanner;
import java.io.*;

public class Main {
    private static int[] numbers = new int[4];
    public static void main(String[] args) throws IOException{
        File file = new File("c:/dimensions.txt");
        Scanner input = new Scanner(file);
        while(input.hasNext()){
            String[] strArray = input.nextLine().split(" ");
            for(int i = 0; i < numbers.length; i++) numbers[i] = 0;
            for(int i = 0; i < strArray.length; i++) numbers[i] = Integer.parseInt(strArray[i]);
            Dimensions(numbers[0], numbers[1], numbers[2], numbers[3]);
        }
    }

    private static void Dimensions(int n, int a, int b, int c){
        if(a == 0 && b == 0 && c == 0){
            print(n, a, b, c);
            return;
        }
        if(c != 0) Dimensions(n, a, b, c - 1);
        else if(b != 0) Dimensions(n, a, b - 1, numbers[3]);
        else Dimensions(n, a - 1, numbers[2], numbers[3]);
        print(n, a, b, c);
    }

    private static void print(int n, int a, int b, int c){
        if(n == 1) System.out.println(a);
        else if(n == 2) System.out.println(a + " " + b);
        else if(n == 3) System.out.println(a + " " + b + " " + c);
    }
}

```