import java.util.Scanner;

public class NextFit {

    public static void main(String[] args) {

        Scanner scanner = new Scanner(System.in);

        System.out.print("Enter the number of memory blocks: ");

        int numBlocks = scanner.nextInt();

        int[] memoryBlocks = new int[numBlocks];

        boolean[] isBlockUsed = new boolean[numBlocks];

        System.out.println("Enter the size of each memory block:");

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

            memoryBlocks[i] = scanner.nextInt();

        }

        System.out.print("Enter the number of processes: ");

        int numProcesses = scanner.nextInt();

        int[] processSizes = new int[numProcesses];

        System.out.println("Enter the size of each process:");

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

            processSizes[i] = scanner.nextInt();

        }

        int lastAllocatedIndex = 0;

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

            boolean allocated = false;

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

                int index = (lastAllocatedIndex + j) % numBlocks;

                if (!isBlockUsed[index] && memoryBlocks[index] >= processSizes[i]) {

                    System.out.println("Process " + (i + 1) + " of size " + processSizes[i] + " allocated to block " + (index + 1));

                    memoryBlocks[index] -= processSizes[i];

                    isBlockUsed[index] = true;

                    lastAllocatedIndex = index;

                    allocated = true;

                    break;

                }

            }

            if (!allocated) {

                System.out.println("Process " + (i + 1) + " of size " + processSizes[i] + " could not be allocated.");

            }

        }

        scanner.close();

    }

}

