

单词反转，采用栈，先进后出的特点：

```
package bilibili;
```

```
import java.util.Scanner;
```

```
import java.util.Stack;
```

```
public class Main {
```

```
    public static void main(String[] args) {
```

```
        Scanner scanner=new Scanner(System.in);
```

```
        String str="";
```

```
        while (scanner.hasNext()) {
```

```
            str=scanner.nextLine();
```

```
            String[] strings=str.split(" ");
```

```
            Stack<String> stack=new Stack<>();
```

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

```
                stack.push(strings[i]);
```

```
            }
```

```
            while (!stack.isEmpty()) {
```

```
                System.out.print(stack.pop()+" ");
```

```
            }
```

```
        }
```

```
        scanner.close();
```

```
    }
```

```
}
```

背包问题，采用标记价值的索引号跟踪

```
package Maxbag;
```

```
import java.util.Arrays;
```

```
import java.util.Scanner;
```

```
public class Main {
```

```
    public static void main(String[] args) {
```

```
        Scanner scanner=new Scanner(System.in);
```

```
        int N,M,sum=0,i;
```

```
        while (scanner.hasNext()) {
```

```
            N=scanner.nextInt();
```

```
            M=scanner.nextInt();
```

```
            int [] w=new int[N];
```

```

int [] v=new int[N];
double [] p=new double[N];
double [][] q=new double[N][N];
for ( i = 0; i < N; i++) {
    w[i]=scanner.nextInt();
}
for ( i = 0; i < N; i++) {
    v[i]=scanner.nextInt();
}
for (i = 0; i < N; i++) {
    p[i]=v[i]/w[i];
    q[i][i]=p[i];

}
Arrays.sort(p);
int num=N-1;
for ( i = 0; i < N; i++) {
    if (q[i][i]==p[num]) {

        M-=w[i];
        if (M>0) {
            sum+=v[i];
        }
        if (M<0) {
            break;
        }
        num--;
    }
}
System.out.println(sum);
}

scanner.close();

}
}

```