

# 16

## Permutates

10 points

### Introduction

**A permute of a number is another number whose digits are the same in a different order. You have to write a program that calculates all the different permutes for a specific number.**

### Input

**The input of the program is a list of numbers, ending with a zero.**

```
135
2468
2442
0
```

### Output

**The output of the program is the list of permutes of each number, ordered from smallest to biggest. Numbers cannot be repeated so be careful with those input numbers whose digits are repeated.**

```
135
153
315
351
513
531
2468
2486
2648
2684
2846
2864
4268
4286
4628
4682
4826
4862
6248
6284
6428
6482
6824
6842
8246
8264
8426
8462
8624
8642
```

2244  
2424  
2442  
4224  
4242  
4422