Exercitiul 1

```
#pentru input
#12 -1 345 -1 2 3 -29
#-1 13 14 345 -1 17 345

#a)

s1 = set(int(x) for x in input().split())
s2 = set(int(x) for x in input().split())

#b)

ls = list(s1-s2)
print(ls)

#c)

ls1 = list(set(int(x) for x in s1 | s2 if x > 0))
print(sorted(ls1, key = lambda x: x%10, reverse = True), sep = ", ")

#d)

L1 = list(s1)
L2 = list(s2)
L = list(zip(L1, L2))
print(L)
```

```
12 -1 345 -1 2 3 -29
-1 13 14 345 -1 17 345
[2, 3, 12, -29]
[17, 345, 14, 3, 13, 2, 12]
[(2, 13), (3, 14), (-29, 17), (12, 345), (345, -1)]
```

Exercitiul 2

```
#subpunctul a)

f = open("date4.txt")

d = {'INMATRICULAT': {}, 'NEINMATRICULAT': {}}
ls = [x.split(", ") for x in [y.strip() for y in f.readlines()]]
for i in ls:
    cheie = max(i[1], 'INMATRICULAT', key = len)
    a = d[cheie].get(i[2], [])
    c = i[3:]
    if len(cheie) != 14:
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```
        c.append(i[1])
    c.insert(0, i[0])
    a.append(c)
    d[cheie][i[2]] = a
print(d)

f.close()

#subpunctul b)

for tip in d:
    print(tip)
    for marca in d[tip]:
        for masina in d[tip][marca]:
            if masina[2] == 'alb':
                if tip[0] == 'N':
                    print(masina[0], marca, masina[1], masina[2])
                else:
                    print(masina[0],masina[3], marca, masina[1],
masina[2])
    print()

#subpuncul c)

def eliminare_numere(d, *s):
    for marca in d["INMATRICULAT"]:
        for masina in d['INMATRICULAT'][marca]:
            if masina[-1] in s:
                t = masina
                d['INMATRICULAT'][marca].remove(masina)
                a = d['NEINMATRICULAT'].get(marca, [])
                a.append(t[:3])
                d['NEINMATRICULAT'][marca] = a


eliminare_numere(d, "B 123 JUD", "CJ 12 IUB", "BZ 48 LAC")
print(d)

#subpunctul d)

import re

def masini_culoare(nume, culoare):
    return len(re.findall(" " + culoare + "[^a-z]",
open(nume).read()))

masini_culoare("date4.txt", "alb")
```

```
{'INMATRICULAT': {'Toyota': [['UU1234AB', 'Corrola Sedan', 'albastru',
'B 125 TAE'], ['UA1234XY', 'Corrola Sedan', 'rosu', 'BC 12 ABC'],
['UA1234XZ', 'Corrola Touring Sports', 'negru', 'IS 129 ANA']],
```

'Volvo': [['XC1234DF', 'EX90', 'negru', 'VN 101 CPP'], ['AC12JKL6', 'S60', 'verde', 'AB 75 CPP']], 'Ford': [['PQ12KLS3', 'KA', 'gri', 'DJ 15 TEO'], ['MO1257JK', 'Puma', 'albastru', 'CJ 10 MIA'], ['MOASD57J', 'Kuga', 'alb', 'VS 11 CRI']]}, 'NEINMATRICULAT': {'Dacia': [['UU1234AM', 'Duster', 'alb'], ['UU1234AM', 'Lodgy', 'alb']], 'Volvo': [['AM1234BZ', 'EX90', 'gri']]}}
INMATRICULAT
MOASD57J VS 11 CRI Ford Kuga alb

NEINMATRICULAT
UU1234AM Dacia Duster alb
UU1234AM Dacia Lodgy alb

{'INMATRICULAT': {'Toyota': [['UU1234AB', 'Corrola Sedan', 'albastru', 'B 125 TAE'], ['UA1234XY', 'Corrola Sedan', 'rosu', 'BC 12 ABC'], ['UA1234XZ', 'Corrola Touring Sports', 'negru', 'IS 129 ANA']], 'Volvo': [['XC1234DF', 'EX90', 'negru', 'VN 101 CPP'], ['AC12JKL6', 'S60', 'verde', 'AB 75 CPP']], 'Ford': [['PQ12KLS3', 'KA', 'gri', 'DJ 15 TEO'], ['MO1257JK', 'Puma', 'albastru', 'CJ 10 MIA'], ['MOASD57J', 'Kuga', 'alb', 'VS 11 CRI']]}, 'NEINMATRICULAT': {'Dacia': [['UU1234AM', 'Duster', 'alb'], ['UU1234AM', 'Lodgy', 'alb']], 'Volvo': [['AM1234BZ', 'EX90', 'gri']]}}

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