Model lucru 1

II.

```
List<Imobil> list = new ArrayList();
list.add(new Imobil("Casa", "Buc", 3, 250.2, 75000.5));
list.add(new Imobil "Apartament", "Constanta", 2,
100.5, 100000.1));
list.add(new Imobil("Apartament", "Iasi", 1, 50.5,
50000.1));
```

a)

```
List<Imobil> list1 = new ArrayList<>();
list1 = list.stream()
        .filter(i -> i.getNrCamere()>=3 &&
         i.getPret()<=100000)
        .sorted((i1, i2) -> i1.getSuprafata()-i2.
                            getSuprafata())
        .toList();
for(Imobil i: list1)
    System.out.println(i);
```

e)

```
List<String> loc = list.stream
        .map(Imobil::getLocalitate)
        .distinct()
        .toList();
System.out.println(loc);
```

c) List<Imobil> list3 = list.stream()
.filter(d -> d.getLocalitate()
.equals("Bucuresti"))
.filter(d -> d.getPret()>=200000
&& d.getPret()<=500000)
.toList();
for(Imobil i: list3)
System.out.println(i);

d) for(String loca: loc){
List<Imobil> rez = list.stream()
.filter(d -> d.getLocalitate().equals
(loca))
.distinct()
.toList();
for(Imobil im: rez)
System.out.println(im);

}

III.

```
class FirNumarare extends Thread {
    private final String numeFisier;
    private final int smin;
    private final int cmin;
    private int nrAparitii;

    public FirNumarare(String numeFisier, int smin,
int cmin, [illegible]) {
        this.numeFisier = numeFisier;
        this.smin = smin;
        this.cmin = cmin;
        this.nrAparitii = 0;
    }
    public int getNrAparitii() {
        return nrAparitii;

    @Override
    public void run() {
        try {
            Scanner s = new Scanner(new File(numeFisier));
            while (s.hasNextLine()) {
                String linie = s.nextLine();
                String[] prop = linie.split("[.,;:?! ]+");
                int c = Integer.parseInt(prop[2]);
                int s = Integer.parseInt(prop[3]);
```

```
            if (c >= cmin && s >= smin)
                nrAparitii++;

        }
        s.close();

    public static void main(String[] args) {
        Scanner sc = new Scanner(System.in);
        int s = sc.nextInt();
        int c = sc.nextInt();
        FirNumarare f1 = new FirNumarare("agentiiRentSale_
                                          .txt
                                          s, c);
        FirNumarare f2 = new FirNumarare("agentiiRentSale_2.txt
                                          s, c);
        f1.start();
        f1.join();
        f2.start();
        f2.join();
        int nrTotalAparitii = f1.getNrAparitii() + f2.get
                                                   NrAparitii
        System.out.println(nrTotalAparitii);

    }
```

IV.

```
class Adresa {
    String adresa;
    public Adresa(String adresa){
        this.adresa = adresa;
    }
    public String getAdresa() {
        return adresa;
    }
    public void setAdresa(String adresa) {
        this.adresa = adresa;
    }
class Firma {
    private final String nume;
    private final int nrAngajati;
    private final double profit;
    private final Adresa adresa;
    public Firma(String nume, int nrAngajati, double
profit, Adresa adresa) {
        this.nume = nume;
        this.nrAngajati = nrAngajati;
        this.profit = profit
        this.adresa = new Adresa(adresa.getAdresa());
    }
```

```
public String getNume(){
    return nume;
public int getNrAngajati(){
    return nrAngajati;
}
public double getProfit(){
    return profit;
}
public Adresa getAdresa(){
    return new Adresa(adresa.getAdresa());
}
```

I. 1. a)
2. d)
3. c)
4. ~~b)~~ d)
5. b)

a b r a c a d a b r a
A B R A C A D A B R A
0 1 2 3 4 5 6 7 8 9 10

$n = 1$, $g = 8$

$S = (0, 4)$

A B D E C