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class Element {
    public String nume;
    public boolean ascuns;
    public Element(String nume) {
        this.nume = nume;
        ascuns = false;
    }
    public void setAscuns(boolean ascuns) {
        this.ascuns = ascuns;
    }
    public boolean esteAscuns() {
        return ascuns;
    }
    public String getNume() {
        return nume;
    }
}

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class Lista extends Element{
    private ArrayList<Element> elemente;
    public Lista(String nume) {
        super(nume);
        elemente = new ArrayList<Element>();
    }
    public void adauga(Element element) {
        elemente.add(element);
    }
    public int lungime() {
        int contor = 0;
        for (Element element : elemente)
            if (!element.esteAscuns())
                contor++;
        return contor;
    }
    public Element get(int index) {
        return elemente.get(index);
    }
    public int dimensiune() {
        return elemente.size();
    }
}

```

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public class Solution {
    Map<String,Element> registru = new HashMap<>();

    public static void main(String[] args) {
        Solution sol = new Solution();
        Lista A = sol.init();
        sol.queries(A);
    }

    public void adaugaElem(Lista A, String elemName) {
        Element x = new Element(elemName);
        A.adauga(x);
        registru.put(elemName, x);
    }
}

```

```

public Lista init() {
    Lista A = new Lista("A"); registru.put("A", A);
    adaugaElem(A, "a1");
    adaugaElem(A, "a2");

    Lista E = new Lista("E"); registru.put("E", E);
    adaugaElem(E, "e1");
    adaugaElem(E, "e2");
    adaugaElem(E, "e3");
    adaugaElem(E, "e4");
    adaugaElem(E, "e5");
    adaugaElem(E, "e6");
    A.adauga(E);

    adaugaElem(A, "a3");

    Lista F = new Lista("F"); registru.put("F", F);
    adaugaElem(F, "f1");
    adaugaElem(F, "f2");
    A.adauga(F);
    return A;
}

public void queries(Lista A) {
    Scanner scanner = new Scanner(System.in);
    try{
        while (scanner.hasNextLine()) {
            String line = scanner.nextLine().trim();
            char op = line.charAt(0);
            String elemname = line.substring(1).trim();
            Element elem = registru.get(elemname);
            if (elem == null) {
                System.out.println("Element "+elemname+" nu a fost definit");
                continue;
            }
            switch (op) {
                case '-':
                    elem.setAscuns(true);
                    break;
                case '+':
                    elem.setAscuns(false);
                    break;
                case '?':
                    if (!(elem instanceof Lista)) {
                        System.out.println("Element "+elemname+" nu este o lista");
                        continue;
                    } else {
                        Lista lst = (Lista) elem;
                        System.out.println(elemname + ": lungime="+lst.lungime()+"
dimensiune="+lst.dimensiune());
                    }
                }
            }
        }
    } catch (Exception e) {
        System.out.println(e);
    }
}
}

```