

Exercițiul 7 pag. 97

```

import java.util.Scanner;
public class Pr_7 {
    public static void main (String[] args) {
        Scanner sc=new Scanner(System.in);
        double n=sc.nextDouble();
        int S=0, P=1, s=0, p=1, s1=0, p1=1, s2=0, p2=1;
        for(int i=1; i<=n; i++) {
            S=S+(2*i-1); P=P*(2*i-1);
            for(int f=1; f<=n; f++) {
                s=s+(2*f); p=p*(2*f);
            }
            for(int g=1; g<=n; g++) {
                s1=s1+(3*g); p1=p1*(3*g);
            }
            for(int h=1; h<=n; h++) {
                s2=s2+(4*h); p2=p2*(4*h);
            }
            System.out.format("Instruciunea FOR
            %na)Suma="+S+"; Produsul="+P+";%nb)Suma="+s+";
            Produsul="+p+";%nc)Suma="+s1+";
            Produsul="+p1+";%nd)Suma="+s2+";
            Produsul="+p2+";");
            int I=1, F=1, G=1, H=1, Sum=0, Pr=1, sum=0,
            pr=1, sum1=0, pr1=1, sum2=0, pr2=1;
            while(I<=n) {
                Sum=Sum+(2*I-1); Pr=Pr*(2*I-1);
                I++;
            }
            while(F<=n) {
                sum=sum+(2*F); pr=pr*(2*F);
                F++;
            }
            while(G<=n){
                sum1=sum1+(3*G); pr1=pr1*(3*G);
                G++;
            }
            while(H<=n){
                sum2=sum2+(4*H); pr2=pr2*(4*H);
                H++;
            }
            System.out.format("%nInstruciunea While
            %na)Suma="+Sum+";
            Produsul="+Pr+";%nb)Suma="+sum+";
            Produsul="+pr+";%nc)Suma="+sum1+";
            Produsul="+pr1+";%nd)Suma="+sum2+";
            Produsul="+pr2+";");
            sc.close();
        }
    }
}

```

Exercițiul de pe fișă

```

import java.util.Scanner;
public class Ex_fisa {
    public static void main (String[] args) {
        Scanner sc=new Scanner(System.in);
        double n=sc.nextDouble();
        double i=1, s=0, p=1;
        for(; i<=n; i++) {
            s=s+(i/(i+1)); p=p*(i/(i+1));
        }
        System.out.format("Instruciunea
        FOR%nSuma="+s+";%nProdusul="+p+");
        double I=1, S=0, P=1;
        while(I<=n) {
            S=S+(I/(I+1)); P=P*(I/(I+1));
            I++;
        }
        System.out.format("%nInstruciunea
        WHILE%nSuma="+S+";%nProdusul="+P+");
        sc.close();
    }
}

```

Exercițiul 8 pag. 97

```

import java.util.Scanner;
public class Ex_8 {
    public static void main(String[] Args){
        Scanner sc=new Scanner(System.in);
        double n=sc.nextDouble();
        double i=1, s=0;
        while(i<=n) {
            if(i%2==0) {
                s=s-(1/i);
                i++;
            }else{
                s=s+(1/i);
                i++;
            }
        }
        System.out.println("Suma="+s);
        sc.close();
    }
}

```

Exercițiul din clasă: $1 + \sqrt{2} + \sqrt{3} + \dots + \sqrt{n}$

```

import java.util.Scanner;
public class Radical {
    public static void main (String[] args) {
        Scanner sc=new Scanner(System.in);
        double n=sc.nextDouble();
        double i=1, s=0, p=1;
        for(; i<=n; i++) {
            double I=Math.sqrt(i);
            s=s+I; p=p*I;
        }
        System.out.format("Instruciunea
        FOR%nSuma="+s+";%nProdusul="+p+");
        double i1=1, s1=0, p1=1;
        while(i1<=n) {
            double I1=Math.sqrt(i1);
            s1=s1+I1; p1=p1*I1;
            i1++;
        }
        System.out.format("%nInstruciunea
        WHILE%nSuma="+s1+";%nProdusul="+p1+");
        sc.close();
    }
}

```