**Laborator 1**

**16.**

var x,x1,x2,x3:integer;

begin

read(x);

x3:=x mod 10;

x1:= x div 10;

x1:= x div 100;

x2:=x div 10;

x2:=x2 mod 10;

write(x3,x2,x1);end.

**2.**

var x,x1,x2:integer;

begin

read(x);

x2:= x mod 10;

x1:= x div 1000;

write(x1,x2);end.

**Laborator 2**

**16.**

var

xs,ys,xd,yd:integer;

x,y:integer;

begin

read(xs,ys,xd,yd);

read(x,y);

if (x > sqrt(sqr((xs-xd)+sqr((ys-yd))))) or (y > sqrt(sqr((xs-xd)+sqr((ys-yd))))) then write('In afara') else

write('Se afla inauntru');end.

**2.**

var a,b,c:integer;

begin

read(a,b,c);

if (a=b) or (a=c) or (b=c) then write('isoscel');

if ((a=b) and (a=c) and (b=c)) then write('echilater..');

if sqr(c)=sqr(a)+sqr(b) then write('drept...');

if ((a+b>c) and (a+c>b) and (b+c>a)) then write('oricare...');end.

**Laborator 3**

**1.**

var ch:char;

begin

read(ch);

case ch of

'0'..'9' : write('Cifra');

'A'..'Z' : write('Litera');

'a'..'z' : write('Litera');

':'..'@' : write('Operator');

else write('Caracter necunoscut');

end;

end.

**15.**

var

C:Char;

N:Integer;

begin

Readln(C);

Readln(N);

Case C of

'N':Case N of

1: write('Stinga - Nord');

0:write('continua deplasarea - Nord');

2 : write('Dreapta - Nord');

end;

'E':Case N of

1: write('Stinga - Est');

0:write('continua deplasarea - Est');

2 : write('Dreapta - Est');

end;

'S':Case N of

1: write('Stinga - Sud');

0:write('continua deplasarea - Sud');

2 : write('Dreapta - Sud');

end;

'V':Case N of

1: write('Stinga - Vest');

0:write('continua deplasarea -Vest');

2 : write('Dreapta - Vest');

end;

end;

end.

**Laborator 4**

**16.**

var

x1,x2,x3,x4,x5,x6:integer;

begin

for x1:=0 to 9 do

for x2:=0 to 9 do

for x3:=0 to 9 do

for x4:=0 to 9 do

for x5:=0 to 9 do

for x6:=0 to 9 do

if (x1+x2+x3=x4+x5+x6) then

write(x1,x2,x3,x4,x5,x6,' ');end.

**1.**

var sum,i,n:integer;

begin

read(n);

i:=0;

repeat

inc(i);

if i mod 2=0 then sum:=sum+i;

until i=n ;

write(sum);

end.

**Laborator 5**

**16.**

var n:char;

par:integer;

begin

par:=0;

repeat

readln(n);

if (ord(n) mod 2=0) then par:=par+1;

until (n='\*');

writeln('Numarul cifrelor pare este: ',par);end.

**2.**

var i,n,rez:integer;

begin

repeat

read(n);

if (n >=10) and (n<=99) then

case n of

11 : inc(rez);

22 : inc(rez);

33 : inc(rez);

44 : inc(rez);

55 : inc(rez);

66 : inc(rez);

77 : inc(rez);

88 : inc(rez);

99 : inc(rez);

end;

until n=0 ;

writeln(rez);

end.

**Laborator 6**

**16.**

var x1,y1,x2,y2:real;dist:real;

procedure x;

begin

dist:=sqrt((sqr(x2-x1))+sqr(y2-y1));

write('M(',(x1+x2)/2, ';',(y1+y2)/2,')');

end;

begin

read(x1,y1,x2,y2);

x;end.

**1.**

var a,b,c:integer;

delta:real;

x1,x2:real;

procedure x;

begin

delta:=sqr(b)-4\*a\*c;

if delta<0 then write('Nu are sol');

if delta=0 then

begin

x1:=-(b/2\*a);

write('x1=x2=',x1);

end;

if delta>0 then begin

x1:=((-b+sqrt(delta))/2\*a);

x2:=((-b-sqrt(delta))/2\*a);

write('x1=',x1,'x2=',x2);

end;

end;

begin

read(a,b,c);

x;

end.

**Laborator 7**

**16.**

var i:integer;

s:longint;

function factorial(a:longint):longint;

var j:integer;

rez:longint;

begin

rez:=1;

for j:=1 to a do

rez:= rez\*j;

s:=s+rez;

end;

begin

for i:=2 to 100 do

if i mod 2 = 0 then factorial(i);

writeln(s);

end. //vom obtine numar negativ (depaseste limita longint).

**1.** //cel mai mare divizor comun

var a,b,c:integer;

Function cmmdc(a,b:integer):integer;

Begin

While a<>b do

if a>b then a:=a-b

else b:=b-a;

cmmdc:=a;

End;

Begin

write('a,b,c: ');readln(a,b,c);

writeln('Rez: ', cmmdc(cmmdc(a,b),c));

readln;

End.

**Laborator 8**

**16.**

type a=array[1..100] of integer;

var i:integer;

poz:integer;

x:a;

n,neg:integer;

begin

readln(n);

writeln('poz=');readln(poz);

for i:=1 to n do

readln(x[i]);

for i:=1 to n do

if x[i] < 0 then inc(neg);

x[poz]:=neg;

for i:=1 to n do

write(x[i],' ' );

end.

**3.**

type a= array[1..100] of integer;

var i:integer;

x:a;

n,aux:integer;

begin

read(n);

for i:= 1 to n do

readln(x[i]);

//schimb

aux:=x[n];

x[n]:=x[n-1];

x[n-1]:=aux;

for i:= 1 to n do

write(x[i], ' ');

end.

**Laborator 9**

**1.**

type a = array[1..100] of integer;

var x:a;

i:integer;

n:integer;

rez:integer;

begin

readln(n);

for i:= 1 to n do

readln(x[i]);

for i:= 1 to n do

if x[i] = x[i+1] then inc(rez);

writeln(rez);

end.

**14.**

var i,j,k: integer;

a: array [1..1000] of integer;

n,x:integer;

begin

readln(n);

readln(x);

for i:=1 to n do

readln(a[i]);

for i:=1 to n do

begin

if i < n then

if ((a[i] + a[i+1]) =x) then

write(a[i], '--' , a[i+1], ' ');

end;

end.

**Laborator 10**

**1.**

var s:string;

i:integer;

begin

readln(s);

for i:= 1 to length(S) do

if s[i] in ['a', 'e', 'i', 'o', 'u'] then s[i] := '\*';

writeln(s);

end.

**16.**

var s,s1,s2: string;

i,j,n: integer;

ch: char;

begin

write('s1=');

readln(s1);

writeln('s2=');

readln(s2);

s:=s1+s2;

n:=length(s);

for i:=1 to n-1 do

for j:=i+1 to n do

if s[i]>s[j] then

begin

ch:=s[i];

s[i]:=s[j];

s[j]:=ch;

end;

writeln(s);

end.

**Laborator 11**