**Tema**

**Subiectul I**

1.**d. 7.5**

2. A43 = <

A52 = <; A53 = <; A54 = <

A61 = <; A62 = <; A63 = <; A64 = <; A65 = <

**b. j<i && i+j>6**

3. **c.(60,50,45,36,25,20,8,5,4,2)**

4. **c.81**

5. n/2+1

1.y=1 x=100 n=8/2+1=5

2.y=100 x=100 n=4

3.y=100 x=10000 n=4/2+1=3

4.y=1000000 x=1000 n=2

5.y=1000000 x=100000 n=2/2+1=2

6.y=1000000 x=1000000 n=2/2+1=2

7. ....

n/2-1

1.y=1 x=100 n=8/2-1=3

2.y=100 x=100 n=2

3.y=100 x=10000 n=2/2-1=0

n/2

1.y=1 x=100 n=4

2.y=1 x=10000 n=2

3.y=1 x=100000000 n=1

4.y=100000000 x=100000000 n=0

**a.n/2**

**Subiectul II**

1.

a. 240107

1.

C=0 b=240107 x=0

b=24010

b=2401

b=240

b=24

b=2

b=0

SCRIE 0

C=2

2.

C=2 b=240107 x=0

B=....

B=2%2=c

X=1

SCRIE 1

C=4

3.C=4 b=240106 x=0

B=24%4=c

X=1

SCRIE 1

C=6

4. c=6 b=240106 x=0

B=240106%6=c

X=1

SCRIE 1

5.C=8 b=240106 x=0

B=...

X=0

SCRIE 0

C=10

STOP

**Raspuns: 01110** pt a = 240107

b. **100000**

**9999999**

c. ---

d. **while(c>9)**

2.

#include <iostream>

#include <math.h>

using namespace std;

int main(){

int memorie;

char monitor;

cin >> memorie >> monitor;

cout << memorie << " ";

switch (monitor) {

case 'L':

cout << "Tehnologie actuala";

break;

case 'C':

cout << "Tehnologie actuala";

break;

case 'T':

cout << "Tehnologie invechita";

break;

}

return 0;

}

3.0,1,2,4,7,16,19

**SUBIECTUL III**

1. #include <iostream>

using namespace std;

int main(){

int a, b, s = 0;

cin >> a >> b;

if(a < b){

int aux = a;

a = b;

b = aux;

}

for(int i = 1; i < a; i++)

if((a % i == 0) && (b % i == 0))

s = s + i;

cout << s;

return 0;

}

2.

#include <iostream>

using namespace std;

int schimbare(int x){

int c1, c23, c123;

c1 = x / 100;

c23 = x % 100;

c123 = c23 \* 10 + c1;

return c123;

}

int main(){

int n, \*v, x, ok = 0;

cin >> n;

v = new int[n];

for(int i = 0; i < n; i++)

cin >> v[i];

for(int i = 0; i < n; i++){

if(v[i] > 99 && v[i] < 1000){

x = schimbare(v[i]);

v[i] = x;

ok = 1;

}

}

if(ok == 1){

for(int i = 0; i < n; i++)

cout << v[i] <<" ";

}else cout <<"nu exista";

return 0;

}

3.

Nu imi dau seama la acesta.