

The image shows a C++ IDE with three main panes. On the left is a Project Explorer showing a workspace named 'Tema36' with subfolders 'Sources' and 'Others'. 'Sources' contains 'main.cpp', and 'Others' contains 'numere.in' and 'numere.out'. The top pane shows the 'numere.in' file with the following content:

```
1 8
2 2 0 13 515 56 0 7 88
3
4
```

The bottom pane shows the 'numere.out' file with the following content:

```
1 6 5 3 3 1 0 2
```

The right pane shows the 'main.cpp' file with the following code:

```
1 #include <iostream>
2 #include<fstream>
3 using namespace std;
4 int main()
5 {
6     ifstream f("numere.in");
7     ofstream g("numere.out");
8     int n,i,nr1=0,nr2=0,nr3=0,nr4=0,nr5=0,nr6=0;
9     long x,y,z;
10    f>>n;
11    for(i=1;i<=n;i++)
12    {
13        f>>x;
14        if(x!=0)nr1++;
15        if(x%2==0)nr2++;
16        if(x>9 && x<100)nr3++;
17        if(x>99 && x<1000)nr4++;
18        if(x>999 && x<10099)nr5++;
19        y=0;z=x;
20        while(z!=0)
21        {
22            y=y*10+z%10;
23            z=z/10;
24        }
25        if(x==y && x>=10) nr6++;
26    }
27    g<<nr1<<' '<<nr2<<' '<<n-nr2<<' '<<nr3<<' ';
28    g<<nr4<<' '<<nr5<<' '<<nr6;
29
30    f.close();
31    g.close();
32    return 0;
33 }
34
```

Tema 36

The screenshot shows a C++ IDE with three main windows:

- numere.in**:

```
1 9
2 212 44 111 3333
3 233 100 1234 3 88
4
```
- numere.out**:

```
1 1678
2 3680
3 132
4 656
5 4567
6 3656
7
```
- *main.cpp**:

```
1 #include <iostream>
2 #include<fstream>
3 using namespace std;
4 int main()
5 {
6     ifstream f("numere.in");
7     ofstream g("numere.out");
8     int n,i,s1=0,s2=0,s3=0,s4=0,s5=0,s6=0;
9     int nr1=0,nr3=0,nr4=0,nr5=0,nr6=0;
10    long x,y,z;
11    f>>n;
12    for(i=1;i<=n;i++)
13    {
14        f>>x;
15        if(x%2==0){s1+=x;nr1++;}
16        else s2+=x;
17        if(x>9 && x<100){s3+=x;nr3++;}
18        if(x>99 && x<1000){s4+=x;nr4++;}
19        if(x>999 && x<10000){s5+=x;nr5++;}
20        y=0;z=x;
21        while(z!=0)
22        {
23            y=y*10+z%10;
24            z=z/10;
25        }
26        if(x==y && x>99){s6+=x;nr6++;}
27    }
28    if(nr1==0)g<<"NU EXISTA"<<endl; else g<<s1<<endl;
29    if(nr2==n)g<<"NU EXISTA"<<endl; else g<<s2<<endl;
30    if(nr3==0)g<<"NU EXISTA"<<endl; else g<<s3<<endl;
31    if(nr4==0)g<<"NU EXISTA"<<endl; else g<<s4<<endl;
32    if(nr5==0)g<<"NU EXISTA"<<endl; else g<<s5<<endl;
33    if(nr6==0)g<<"NU EXISTA"<<endl; else g<<s6<<endl;
34    f.close();
35    g.close();
36    return 0;
37 }
```

Tema 37

The screenshot shows a C++ IDE with three main panes. On the left is a 'Management' pane with a project tree for 'tema38' containing 'main.cpp', 'numere.in', and 'numere.out'. The top-left pane shows the input file 'numere.in' with the following content:

```
1 8
2 4 11 22 111
3 5 6 8 7
4
```

The bottom-left pane shows the output file 'numere.out' with the following content:

```
1 6720
2 11
3 13440
4 242
5
```

The right pane shows the source code 'main.cpp' with the following code:

```
1 #include <iostream>
2 #include<fstream>
3 using namespace std;
4 int main()
5 {
6     ifstream f("numere.in");
7     ofstream g("numere.out");
8     int n,i,p1=1,p2=1,p3=1,p4=1,nr1=0,nr2=0,nr3=0,nr4=0;
9     long x,y,z;
10    f>>n;
11    for(i=1;i<=n;i++)
12    {
13        f>>x;
14        if(x>=0 && x<10){p1*=x;nr1++;}
15        if(x>9 && x<100 && x/10==1){p2*=x;nr2++;}
16        p3=p3*(x%10);
17        if(x>=10 && x<=99 && x/10==x%10){p4*=x;nr4++;}
18    }
19    if(nr1==0)g<<"NU EXISTA"<<endl; else g<<p1<<endl;
20    if(nr2==0)g<<"NU EXISTA"<<endl; else g<<p2<<endl;
21    g<<p3<<endl;
22    if(nr4==0)g<<"NU EXISTA"<<endl; else g<<p4<<endl;
23    f.close();
24    g.close();
25    return 0;
26 }
```

Tema 38