

Examenul de bacalaureat național 2018
Proba E. d) - Informatică
Rezolvare - Limbajul C/C++

Varianta 2

SUBIECTUL I

1. c
2.
 - a. 69
 - b. 68, 86, 608, 806, 680, 860
 - c. $X \rightarrow S + X * X$
 - d.

SUBIECTUL al II-lea

1. b
2. a și b
3. 1, 6, 8 sau 9
4.


```

for (i=0; i<9; i++)
{
    for (j=0; j<9; j++)
    {
        if ((i==j) || (i+j==8))
            a[i][j]=0;
        else
            a[i][j]=(i+j)%8;
    }
}
            
```

5.

```

1  #include <iostream>
2  #include <cstring>
3  using namespace std;
4  char s[100], c[100], f[100];
5  int cif, i, j = 0;
6  int main()
7  {
8      cin.getline(s, 100);
9      cin.getline(c, 100);
10     for (i = strlen(c) - 1; i > 0; i--)
11     {
12         cif = c[i] - 48;
13         if (cif % 2 == 0)
14         {
15             f[j] = s[i]; j++;
16         }
17     }
18     f[j] = s[0]; j++;
19     for (i = 1; i < strlen(c); i++)
20     {
21         cif = c[i] - 48;
22         if (cif % 2 == 1)
23         {
24             f[j] = s[i]; j++;
25         }
26     }
27     cout << f;
28     return 0;
29 }
    
```

```

1  #include <iostream>
2  using namespace std;
3  int i, n, s, x;
4  int main()
5  {
6      cout << "n="; cin >> n;
7      if (n < 0)
8          n = -n;
9      s = 0;
10     do
11     {
12         x = n % 10;
13         for (i = 1; i <= x; i++)
14         {
15             s = s + x;
16         }
17         n = n / 10;
18     } while (n > 0);
19     cout << s;
20     return 0;
21 }
    
```

SUBIECTUL al III-lea

1. a
2. 5, 6, 7, 8, ...
- 3.

4.

```
3
4 int resturi(int n, int x, int y, int r)
5 {
6     int i,j=0;
7     for (i=1;i<=n;i++)
8     {
9         if ((i%x==r)&&(i%y==r))
10            j++;
11    }
12    return j;
13 }
```

```
1 #include <iostream>
2 #include <fstream>
3 using namespace std;
4 ifstream f("bac.txt");
5 int n, p=-1, pl=-1, i=0,j=0;
6 int main()
7 {
8     while (f>>n)
9     {
10        if ((p!=n)&&(pl!=n))
11        {
12            j++;
13            if (i>j)
14                j=i;
15        }
16        else
17            j=1;
18        pl=p;
19        p=n;
20    }
21    cout<<j;
22    return 0;
23 }
```