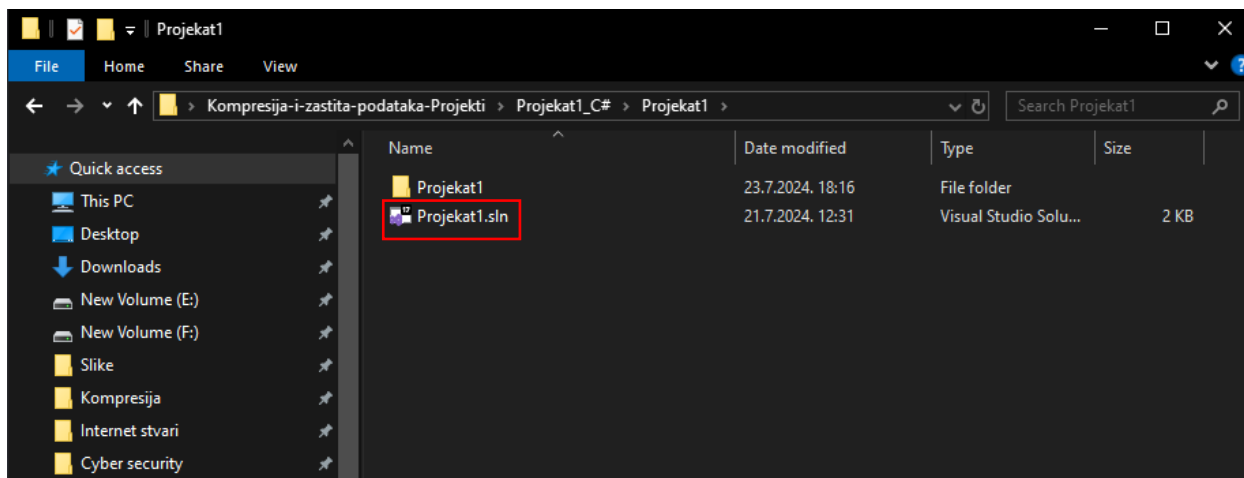


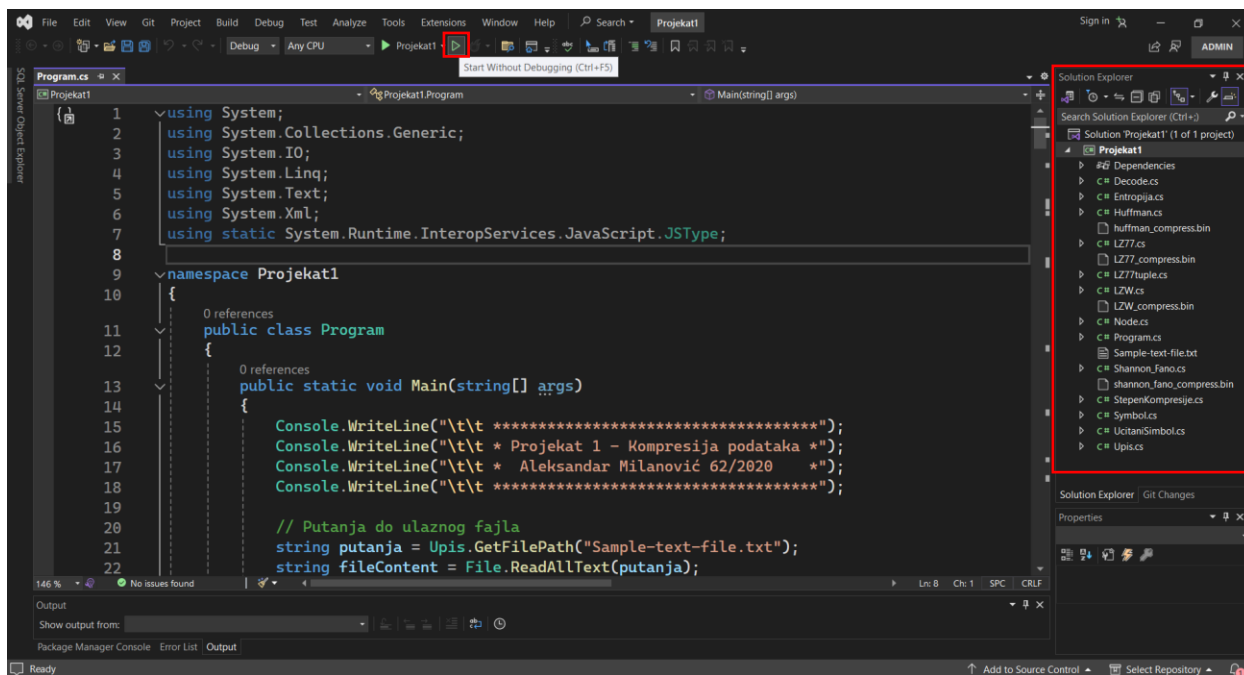
Uputstvo za pokretanje implementacije projekata

Projekti su implementirani u programskom jeziku C#, korišćeno je radno okruženje Visual Studio 2022.

Otvaramo projekat u Visual Studio okruženju tako što kliknemo na odgovarajući **.sln fajl** („Projekat1.sln“, analogno važi i za drugi projekat).



Nakon pokretanja radnog okruženja implementaciju pokrećemo klikom na dugme ili prečicom **Ctrl+F5** (pokretanje bez ulaska u debug mode). Sa desne strane radnog okruženja u Solution Explorer-u nalaze se sve klase i fajlovi implementacije projekata.



Za slučaj da iz nekog razloga ne uspete da pokrenete implementaciju ovo je rezultat:

```
Microsoft Visual Studio Debug Console

*****
* Projekat 1 - Kompresija podataka *
* Aleksandar Milanovic 62/2020 *
*****

=====
1. Racunanje bajt-entropije...
=====
Ukupan broj simbola ulaznog fajla: 5242880

Simbol A: Pojavljuje se 1047512 puta, Verovatnoca: 0,20
Simbol B: Pojavljuje se 1049111 puta, Verovatnoca: 0,20
Simbol C: Pojavljuje se 1049453 puta, Verovatnoca: 0,20
Simbol D: Pojavljuje se 1049135 puta, Verovatnoca: 0,20
Simbol E: Pojavljuje se 1047669 puta, Verovatnoca: 0,20

Ukupna bajt-entropija ulaznog fajla je: 2,3219

=====
2.1. Konstrukcija Shannon-Fano koda...
=====
Kodiranje:
Simbol C => kod: 00
Simbol D => kod: 01
Simbol B => kod: 10
Simbol E => kod: 110
Simbol A => kod: 111

Enkodiranje Shannon-Fano...
Kompresija Shannon-Fano...
Upisivanje u kompresovani fajl...
Dekompresija Shannon-Fano...

Shannon-Fano kompresija je uspesna. Sadržaj ulaznog i dekompresovanog fajla je isti!
Prvih 20 simbola originalnog fajla:  BADDEBEBADCEBCDADBBC
Prvih 20 simbola dekompresovanog fajla: BADDEBEBADCEBCDADBBC

-----
Velicina ulaznog fajla: 5120,00 KB
Velicina kompresovanog fajla: 1535,79 KB
-----
Stepen kompresije ShannonFano: 3,3338
Gotov Shannon-Fano
```

```
Microsoft Visual Studio Debug Console

=====
2.2. Konstrukcija Huffman-ovog koda...
=====
Kodiranje:
Simbol B => kod: 00
Simbol D => kod: 01
Simbol C => kod: 10
Simbol A => kod: 110
Simbol E => kod: 111

Enkodiranje Huffman...
Kompresija Huffman...
Upisivanje u kompresovani fajl...
Dekompresija Huffman...

Huffman-ova kompresija je uspesna. Sadrzaj ulaznog i dekompresovanog fajla je isti!
Prvih 20 simbola originalnog fajla:  BADDEBEBADCEBCDADBBC
Prvih 20 simbola dekompresovanog fajla: BADDEBEBADCEBCDADBBC
-----
Velicina ulaznog fajla:      5120,00 KB
Velicina kompresovanog fajla: 1535,79 KB
-----
Stepen kompresije Huffman: 3,3338
Gotov Huffman

=====
3.1. Konstrukcija LZ77 (Lempel-Ziv) koda...
=====
Kompresija LZ77 (moze malo da potraje)...
Upisivanje u kompresovani fajl...
Dekompresija LZ77...

LZ77 kompresija je uspesna. Sadrzaj ulaznog i dekompresovanog fajla je isti!
Prvih 20 simbola originalnog fajla:  BADDEBEBADCEBCDADBBC
Prvih 20 simbola dekompresovanog fajla: BADDEBEBADCEBCDADBBC
-----
Velicina ulaznog fajla:      5120,00 KB
Velicina kompresovanog fajla: 4971,48 KB
-----
Stepen kompresije LZ77: 1,0299
LZ77 gotov

=====
3.1. Konstrukcija LZW (Lempel-Ziv-Welch) koda...
=====
Enkodiranje LZW...
Upisivanje u kompresovani fajl...
Dekompresija LZW...

LZW kompresija je uspesna. Sadrzaj ulaznog i dekompresovanog fajla je isti!
Prvih 20 simbola originalnog fajla:  BADDEBEBADCEBCDADBBC
Prvih 20 simbola dekompresovanog fajla: BADDEBEBADCEBCDADBBC
-----
Velicina ulaznog fajla:      5120,00 KB
Velicina kompresovanog fajla: 4515,24 KB
-----
Stepen kompresije LZW: 1,1339
LZW gotov

=====
Poredjenje efikasnosti algoritama prema stepenu kompresije:

Stepen kompresije ShannonFano: 3,3338
Stepen kompresije Huffman:      3,3338
Stepen kompresije LZ77:         1,0299
Stepen kompresije LZW:          1,1339
=====

KRAJ PROGRAMA!

C:\Users\aleks\Desktop\Kompresija-i-zastita-podataka-Projekti\Projekat1_C#\Projekat1\Projekat1\bin\Debug\net8.0\Projekat
1.exe (process 18676) exited with code 0.
Press any key to close this window . . .
```

```
Select Microsoft Visual Studio Debug Console

*****
* Projekat 2 - Zastita podataka      *
* Aleksandar Milanovic 62/2020      *
*****

=====
1. Konstruisanje matrice H LDPC koda...
=====

Popunjavanje prvog seta redova:
Matrica H:
1 1 1 1 1 0 0 0 0 0 0 0 0 0 0
0 0 0 0 0 1 1 1 1 1 0 0 0 0 0
0 0 0 0 0 0 0 0 0 0 1 1 1 1 1
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

Popunjavanje drugog seta redova:
Matrica H:
1 1 1 1 1 0 0 0 0 0 0 0 0 0 0
0 0 0 0 0 1 1 1 1 1 0 0 0 0 0
0 0 0 0 0 0 0 0 0 0 1 1 1 1 1
1 1 1 0 1 0 0 0 0 1 0 0 1 0 0
0 0 0 0 0 0 0 1 1 0 0 0 0 0 1
0 0 0 1 0 1 1 0 0 0 1 1 0 1 0
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

Popunjavanje treceg seta redova:
Matrica H:
1 1 1 1 1 0 0 0 0 0 0 0 0 0 0
0 0 0 0 0 1 1 1 1 1 0 0 0 0 0
0 0 0 0 0 0 0 0 0 0 1 1 1 1 1
1 1 1 0 1 0 0 0 0 1 0 0 1 0 0
0 0 0 0 0 0 0 1 1 0 0 0 0 0 1
0 0 0 1 0 1 1 0 0 0 1 1 0 1 0
0 0 0 0 1 1 1 0 0 0 0 1 1 0 1
0 0 1 1 0 0 0 1 0 0 1 0 0 0 0
1 1 0 0 0 0 0 0 1 1 0 0 0 1 0
```

```
Select Microsoft Visual Studio Debug Console

=====
2.1. Generisanje tabele sindroma i korektora...
=====

KOREKTOR:      SINDROM:
0 0 0 0 0 0 0 0 0 0 : 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
1 0 0 1 0 0 0 0 0 1 : 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
1 0 0 1 0 0 0 0 1 0 : 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
1 0 0 0 0 1 0 1 0 : 0 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
1 0 0 1 0 0 1 0 0 : 0 0 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 1 0 0 0 1 1 0 0 : 0 0 0 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0
0 1 0 0 1 0 0 1 0 : 0 0 0 0 0 1 0 0 0 0 0 0 0 0 0 0 0 0
0 1 0 0 1 0 0 0 1 : 0 0 0 0 0 0 1 0 0 0 0 0 0 0 0 0 0 0
0 1 0 1 0 0 0 0 1 : 0 0 0 0 0 0 0 1 0 0 0 0 0 0 0 0 0 0
0 0 1 0 0 1 0 1 0 : 0 0 0 0 0 0 0 0 1 0 0 0 0 0 0 0 0 0
0 0 1 0 0 1 1 0 0 : 0 0 0 0 0 0 0 0 0 1 0 0 0 0 0 0 0 0
0 0 1 1 0 0 1 0 0 : 0 0 0 0 0 0 0 0 0 0 1 0 0 0 0 0 0 0
0 0 1 0 0 1 0 0 1 : 0 0 0 0 0 0 0 0 0 0 0 1 0 0 0 0 0 0
0 0 1 0 1 0 1 0 0 : 0 0 0 0 0 0 0 0 0 0 0 0 1 0 0 0 0 0
0 0 0 0 0 0 0 1 1 : 0 0 0 0 0 0 0 0 0 0 0 0 0 1 0 0 0 0
0 0 0 1 0 1 0 1 1 : 0 0 0 0 0 0 0 0 0 0 0 0 0 0 1 0 0 0
0 0 0 1 0 1 0 0 0 : 1 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0 0 0 0 0 1 0 1 : 1 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0 0 0 0 0 1 1 0 : 0 1 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0 0 1 0 1 1 1 0 : 1 0 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0
1 1 0 1 0 1 1 0 1 : 0 1 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0
1 1 0 1 0 1 1 1 0 : 0 0 1 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0
1 1 0 0 0 0 1 1 0 : 1 0 0 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0
1 1 0 1 0 1 0 0 0 : 0 1 0 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0
1 1 0 1 1 0 0 1 1 : 0 0 1 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0
1 1 0 1 1 0 0 0 0 : 0 0 0 1 1 0 0 0 0 0 0 0 0 0 0 0 0 0
1 1 0 0 1 1 0 0 0 : 1 0 0 0 0 1 0 0 0 0 0 0 0 0 0 0 0 0
1 1 0 1 1 0 1 1 0 : 0 1 0 0 0 1 0 0 0 0 0 0 0 0 0 0 0 0
0 0 0 0 1 1 1 1 0 : 0 0 1 0 0 1 0 0 0 0 0 0 0 0 0 0 0 0
1 1 0 0 1 1 0 1 1 : 0 0 0 1 0 1 0 0 0 0 0 0 0 0 0 0 0 0
1 1 0 1 1 0 1 0 1 : 0 0 0 0 1 1 0 0 0 0 0 0 0 0 0 0 0 0
0 0 0 0 1 1 1 0 1 : 1 0 0 0 0 0 1 0 0 0 0 0 0 0 0 0 0 0
1 1 0 0 0 0 0 0 0 : 0 1 0 0 0 0 1 0 0 0 0 0 0 0 0 0 0 0
1 1 0 0 0 0 0 1 1 : 0 0 1 0 0 0 1 0 0 0 0 0 0 0 0 0 0 0
1 1 0 1 0 1 0 1 1 : 0 0 0 1 0 0 1 0 0 0 0 0 0 0 0 0 0 0
1 1 0 0 0 0 1 0 1 : 0 0 0 0 1 0 1 0 0 0 0 0 0 0 0 0 0 0
0 0 0 1 0 1 1 0 1 : 0 0 0 0 0 1 1 0 0 0 0 0 0 0 0 0 0 0
0 0 0 1 1 0 0 1 1 : 1 0 0 0 0 0 0 1 0 0 0 0 0 0 0 0 0 0
0 0 0 1 1 0 0 0 0 : 0 1 0 0 0 0 0 1 0 0 0 0 0 0 0 0 0 0
1 0 1 1 0 1 0 1 1 : 0 0 1 0 0 0 0 1 0 0 0 0 0 0 0 0 0 0
1 0 1 1 0 1 0 0 0 : 0 0 0 1 0 0 0 1 0 0 0 0 0 0 0 0 0 0
1 0 1 0 0 0 0 0 0 : 0 0 0 0 1 0 0 1 0 0 0 0 0 0 0 0 0 0
1 0 1 1 0 1 1 1 0 : 0 0 0 0 0 1 0 1 0 0 0 0 0 0 0 0 0 0
0 1 1 0 0 0 1 1 0 : 0 0 0 0 0 0 1 1 0 0 0 0 0 0 0 0 0 0
0 1 1 0 1 1 0 0 0 : 1 0 0 0 0 0 0 0 1 0 0 0 0 0 0 0 0 0
0 1 1 0 1 1 0 1 1 : 0 1 0 0 0 0 0 0 1 0 0 0 0 0 0 0 0 0
0 1 1 1 0 1 0 1 1 : 0 0 1 0 0 0 0 0 1 0 0 0 0 0 0 0 0 0
1 0 1 1 0 1 1 0 1 : 0 0 0 1 0 0 0 0 1 0 0 0 0 0 0 0 0 0
1 0 1 0 0 0 1 1 0 : 0 0 0 0 1 0 0 0 1 0 0 0 0 0 0 0 0 0
0 1 1 0 0 0 0 0 0 : 0 0 0 0 0 1 0 0 1 0 0 0 0 0 0 0 0 0
0 1 1 0 1 1 1 1 0 : 0 0 0 0 0 0 1 0 1 0 0 0 0 0 0 0 0 0
0 1 1 0 1 1 1 0 1 : 0 0 0 0 0 0 0 1 1 0 0 0 0 0 0 0 0 0
0 1 1 1 0 1 1 0 1 : 1 0 0 0 0 0 0 0 0 1 0 0 0 0 0 0 0 0
1 0 1 0 0 0 1 0 1 : 0 1 0 0 0 0 0 0 0 1 0 0 0 0 0 0 0 0
0 1 1 1 0 1 0 0 0 : 0 0 1 0 0 0 0 0 0 1 0 0 0 0 0 0 0 0
0 1 1 1 1 0 1 1 0 : 0 0 0 1 0 0 0 0 0 0 1 0 0 0 0 0 0 0
0 1 1 1 1 0 1 1 0 : 0 0 0 1 0 0 0 0 0 0 1 0 0 0 0 0 0 0
```

0 1 1 1 1 0 1 0 1 : 0 0 0 0 1 0 0 0 0 1 0 0 0 0 0
0 1 1 0 0 0 1 0 1 : 0 0 0 0 0 1 0 0 0 1 0 0 0 0 0
1 0 1 0 0 0 0 1 1 : 0 0 0 0 0 0 1 0 0 1 0 0 0 0 0
1 0 1 1 1 0 1 0 1 : 0 0 0 0 0 0 0 1 0 1 0 0 0 0 0
1 0 1 1 1 0 1 1 0 : 0 0 0 0 0 0 0 0 1 1 0 0 0 0 0
1 0 1 0 1 1 1 1 0 : 1 0 0 0 0 0 0 0 0 0 1 0 0 0 0
1 0 1 1 1 0 0 0 0 : 0 1 0 0 0 0 0 0 0 0 1 0 0 0 0
0 0 0 0 1 1 0 0 0 : 0 0 1 0 0 0 0 0 0 0 1 0 0 0 0
1 0 0 0 0 1 0 0 1 : 0 0 0 1 0 0 0 0 0 0 1 0 0 0 0
1 0 0 1 0 0 1 1 1 : 0 0 0 0 1 0 0 0 0 0 1 0 0 0 0
1 0 0 0 0 1 1 1 1 : 0 0 0 0 0 1 0 0 0 0 1 0 0 0 0
1 0 0 0 0 1 1 0 0 : 0 0 0 0 0 0 1 0 0 0 1 0 0 0 0
0 1 0 0 0 1 1 1 1 : 0 0 0 0 0 0 0 1 0 0 1 0 0 0 0
0 1 0 1 0 0 1 1 1 : 0 0 0 0 0 0 0 0 1 0 1 0 0 0 0
0 1 0 1 0 0 1 0 0 : 0 0 0 0 0 0 0 0 0 1 1 0 0 0 0
0 1 0 0 0 1 0 0 1 : 1 0 0 0 0 0 0 0 0 0 0 1 0 0 0
0 1 0 0 0 1 0 1 0 : 0 1 0 0 0 0 0 0 0 0 0 1 0 0 0
0 1 0 1 0 0 0 1 0 : 0 0 1 0 0 0 0 0 0 0 0 1 0 0 0
0 1 0 1 1 1 0 0 1 : 0 0 0 1 0 0 0 0 0 0 0 1 0 0 0
0 1 0 1 1 1 0 1 0 : 0 0 0 0 1 0 0 0 0 0 0 1 0 0 0
0 1 0 0 1 0 1 1 1 : 0 0 0 0 0 1 0 0 0 0 0 1 0 0 0
0 1 0 0 1 0 1 0 0 : 0 0 0 0 0 0 1 0 0 0 0 1 0 0 0
0 1 0 1 1 1 1 0 0 : 0 0 0 0 0 0 0 1 0 0 0 1 0 0 0
1 0 0 1 1 1 1 1 1 : 0 0 0 0 0 0 0 0 1 0 0 1 0 0 0
1 0 0 1 1 1 1 0 0 : 0 0 0 0 0 0 0 0 0 1 0 1 0 0 0
1 0 0 0 1 0 1 0 0 : 0 0 0 0 0 0 0 0 0 0 1 1 0 0 0
1 0 0 1 1 1 0 1 0 : 1 0 0 0 0 0 0 0 0 0 0 0 1 0 0
0 1 0 1 1 1 1 1 1 : 0 1 0 0 0 0 0 0 0 0 0 0 1 0 0
1 0 0 0 1 0 1 1 1 : 0 0 1 0 0 0 0 0 0 0 0 0 1 0 0
1 0 0 1 1 1 0 0 1 : 0 0 0 1 0 0 0 0 0 0 0 0 1 0 0
1 0 0 0 1 0 0 1 0 : 0 0 0 0 1 0 0 0 0 0 0 0 1 0 0
1 0 0 0 1 0 0 0 1 : 0 0 0 0 0 1 0 0 0 0 0 0 1 0 0
0 0 1 1 0 0 0 0 1 : 0 0 0 0 0 0 1 0 0 0 0 0 1 0 0
0 0 1 1 0 0 0 1 0 : 0 0 0 0 0 0 0 1 0 0 0 0 1 0 0
0 0 1 0 0 1 1 1 1 : 0 0 0 0 0 0 0 0 1 0 0 0 1 0 0
1 1 1 1 0 0 1 1 1 : 0 0 0 0 0 0 0 0 0 1 0 0 1 0 0
1 1 1 1 0 0 1 0 0 : 0 0 0 0 0 0 0 0 0 0 1 0 1 0 0
1 1 1 0 0 1 1 0 0 : 0 0 0 0 0 0 0 0 0 0 0 1 1 0 0
1 1 1 1 0 0 0 1 0 : 1 0 0 0 0 0 0 0 0 0 0 0 0 1 0
1 1 1 1 1 1 0 0 1 : 0 1 0 0 0 0 0 0 0 0 0 0 0 0 1 0
1 1 1 1 1 1 0 1 0 : 0 0 1 0 0 0 0 0 0 0 0 0 0 0 1 0
1 1 1 0 1 0 0 1 0 : 0 0 0 1 0 0 0 0 0 0 0 0 0 0 1 0
1 1 1 1 1 1 1 0 0 : 0 0 0 0 1 0 0 0 0 0 0 0 0 0 1 0
1 1 1 0 1 0 0 0 1 : 0 0 0 0 0 1 0 0 0 0 0 0 0 0 1 0
1 1 1 1 1 1 1 1 1 : 0 0 0 0 0 0 0 1 0 0 0 0 0 0 1 0
0 0 1 0 1 0 1 1 1 : 0 0 0 0 0 0 0 1 0 0 0 0 0 0 1 0
1 1 1 0 0 1 0 1 0 : 0 0 0 0 0 0 0 0 1 0 0 0 0 0 1 0
1 1 1 0 0 1 0 0 1 : 0 0 0 0 0 0 0 0 0 1 0 0 0 0 1 0
1 1 1 1 0 0 0 0 1 : 0 0 0 0 0 0 0 0 0 0 1 0 0 1 0
1 1 1 0 0 1 1 1 1 : 0 0 0 0 0 0 0 0 0 0 0 1 0 1 0
0 0 1 1 0 0 1 1 1 : 0 0 0 0 0 0 0 0 0 0 0 0 1 1 0
0 0 1 1 1 1 0 0 1 : 1 0 0 0 0 0 0 0 0 0 0 0 0 0 1
0 0 1 1 1 1 0 1 0 : 0 1 0 0 0 0 0 0 0 0 0 0 0 0 1
1 1 1 0 1 0 1 0 0 : 0 0 1 0 0 0 0 0 0 0 0 0 0 0 1
0 0 1 0 1 0 0 1 0 : 0 0 0 1 0 0 0 0 0 0 0 0 0 0 1
1 1 1 0 1 0 1 1 1 : 0 0 0 0 1 0 0 0 0 0 0 0 0 0 1
0 0 1 0 1 0 0 0 1 : 0 0 0 0 0 1 0 0 0 0 0 0 0 0 1
0 0 1 1 1 1 1 1 1 : 0 0 0 0 0 0 1 0 0 0 0 0 0 0 1
0 0 1 1 1 1 1 0 0 : 0 0 0 0 0 0 0 1 0 0 0 0 0 0 1
1 1 0 0 1 1 1 0 1 : 0 0 0 0 0 0 0 0 1 0 0 0 0 0 1
1 1 0 0 1 1 1 1 0 : 0 0 0 0 0 0 0 0 0 1 0 0 0 0 1

```

0 0 0 1 1 0 1 0 1 : 0 0 0 0 0 0 0 0 0 0 1 0 0 0 1
0 0 0 1 1 0 1 1 0 : 0 0 0 0 0 0 0 0 0 0 0 0 1 0 0 1
0 0 0 0 1 1 0 1 1 : 0 0 0 0 0 0 0 0 0 0 0 0 1 0 1
0 1 1 1 0 1 1 1 0 : 0 0 0 0 0 0 0 0 0 0 0 0 0 0 1 1
0 1 1 0 0 0 0 1 1 : 1 1 1 0 0 0 0 0 0 0 0 0 0 0 0 0
0 1 1 1 1 0 0 1 1 : 1 1 0 1 0 0 0 0 0 0 0 0 0 0 0 0
0 1 1 1 1 0 0 0 0 : 1 0 1 1 0 0 0 0 0 0 0 0 0 0 0 0
1 0 1 0 1 1 1 0 1 : 0 1 1 1 0 0 0 0 0 0 0 0 0 0 0 0
1 0 1 1 1 0 0 1 1 : 1 1 0 0 1 0 0 0 0 0 0 0 0 0 0 0
1 0 1 0 1 1 0 0 0 : 1 0 1 0 1 0 0 0 0 0 0 0 0 0 0 0
1 0 1 0 1 1 0 1 1 : 0 1 1 0 1 0 0 0 0 0 0 0 0 0 0 0

```

```

=====
2.2. Racunanje kodnog rastojanja...
=====

```

Kodno rastojanje: 2

```

=====
3. Implementacija Gallager B algoritma...
=====

```

Proizvoljni vektor: 1, 0, 0, 0, 0, 0, 0, 0 (primljena kodna rec)
Dekodirani rezultat: 0, 0, 0, 0, 0, 0, 0, 0 (ispravna kodna rec)

Testiranje nad redovima matrice:
Matrica H:

```

1 1 1 1 1 0 0 0 0 0 0 0 0 0 0 0
0 0 0 0 0 1 1 1 1 0 0 0 0 0 0
0 0 0 0 0 0 0 0 0 0 0 1 1 1 1
1 1 1 0 1 0 0 0 0 1 0 0 1 0 0
0 0 0 0 0 0 0 1 1 0 0 0 0 0 1
0 0 0 1 0 1 1 0 0 0 1 1 0 1 0
0 0 0 0 1 1 1 0 0 0 0 1 1 0 1
0 0 1 1 0 0 0 1 0 0 1 0 0 0 0
1 1 0 0 0 0 0 0 1 1 0 0 0 1 0

```

Ispis dekodiranih rezultata:

```

Algoritam je dostigao stacionarno stanje posle 1 iteracija.
Dekodirani rezultat: 1, 1, 1, 1, 1, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0
Algoritam je dostigao stacionarno stanje posle 1 iteracija.
Dekodirani rezultat: 0, 0, 0, 0, 0, 0, 1, 1, 1, 1, 1, 0, 0, 0, 0
Algoritam je dostigao stacionarno stanje posle 1 iteracija.
Dekodirani rezultat: 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 1, 1, 1, 1, 1
Algoritam je dostigao stacionarno stanje posle 1 iteracija.
Dekodirani rezultat: 1, 1, 1, 0, 1, 0, 0, 0, 0, 0, 1, 0, 0, 1, 0
Algoritam je dostigao stacionarno stanje posle 1 iteracija.
Dekodirani rezultat: 0, 0, 0, 0, 0, 0, 0, 1, 1, 0, 0, 0, 0, 0, 1
Algoritam je dostigao stacionarno stanje posle 1 iteracija.
Dekodirani rezultat: 0, 0, 0, 1, 0, 1, 1, 0, 0, 0, 1, 1, 0, 1, 0
Algoritam je dostigao stacionarno stanje posle 1 iteracija.
Dekodirani rezultat: 0, 0, 0, 0, 1, 1, 1, 0, 0, 0, 0, 1, 1, 0, 1
Algoritam je dostigao stacionarno stanje posle 1 iteracija.
Dekodirani rezultat: 0, 0, 1, 1, 0, 0, 0, 1, 0, 0, 1, 0, 0, 0, 0
Algoritam je dostigao stacionarno stanje posle 1 iteracija.
Dekodirani rezultat: 1, 1, 0, 0, 0, 0, 0, 0, 1, 1, 0, 0, 0, 1, 0

```

KRAJ PROGRAMA!

C:\Users\aleks\Desktop\Kompresija-i-zastita-podataka-Projekti\Projekat2_C#\Projekat2\Projekat2\bin\Debug\net8.0\Projekat2.exe (process 20608) exited with code 0.
Press any key to close this window . . .