## Вхідна система

| (1)        | 3  | 2  | 8  | 3  | 35  |
|------------|----|----|----|----|-----|
| (2)        | 17 | 51 | 13 | 20 | 407 |
| (2)<br>(3) | 0  | 3  | 7  | 3  | 28  |
| (4)        | 16 | 4  | 20 | 16 | 124 |

## Придатна для методу ітерацій система:

| (1) - (3)           | 3  | -1 | 1  | 0  | 7   |
|---------------------|----|----|----|----|-----|
| (2)                 | 17 | 51 | 13 | 20 | 407 |
| (3)                 | 0  | 3  | 7  | 3  | 28  |
| (4) + 3*(3) - 5*(1) | 1  | 6  | 1  | 10 | 33  |

## Результат програми

```
Gauss-Jordan method

(3)x1 + (2)x2 + (8)x3 + (3)x4 = 35

(17)x1 + (51)x2 + (13)x3 + (20)x4 = 407

(0)x1 + (3)x2 + (7)x3 + (3)x4 = 28

(16)x1 + (4)x2 + (20)x3 + (16)x4 = 124

Solved

Roots: x1 = 4 x2 = 6 x3 = 1 x4 = 1

Gauss-Seidel method

(3)x1 + (-1)x2 + (1)x3 + (0)x4 = 7

(17)x1 + (51)x2 + (13)x3 + (20)x4 = 407

(0)x1 + (3)x2 + (7)x3 + (3)x4 = 28

(1)x1 + (6)x2 + (1)x3 + (10)x4 = 33

Solved

Roots: x1 = 4,01640464798344 x2 = 6,72590567327407 x3 = 1,67669172932348 x4 = -1,30485304169513

Absolute error = 1,34647848426539E-12
```