

There are 3 outputs below:

#### Output -1:

```
The equations should be in the format of:
    ax + by = c and
    px + qy = r
Enter a, b, c, p, q, r: 3 2 7 5 -3 37
The provided equations are:
    3x + 2y = 7
    5x - 3y = 37

Solving using Substitution Method:

The calculated value of x is = 5.00
The calculated value of y is = -4.00

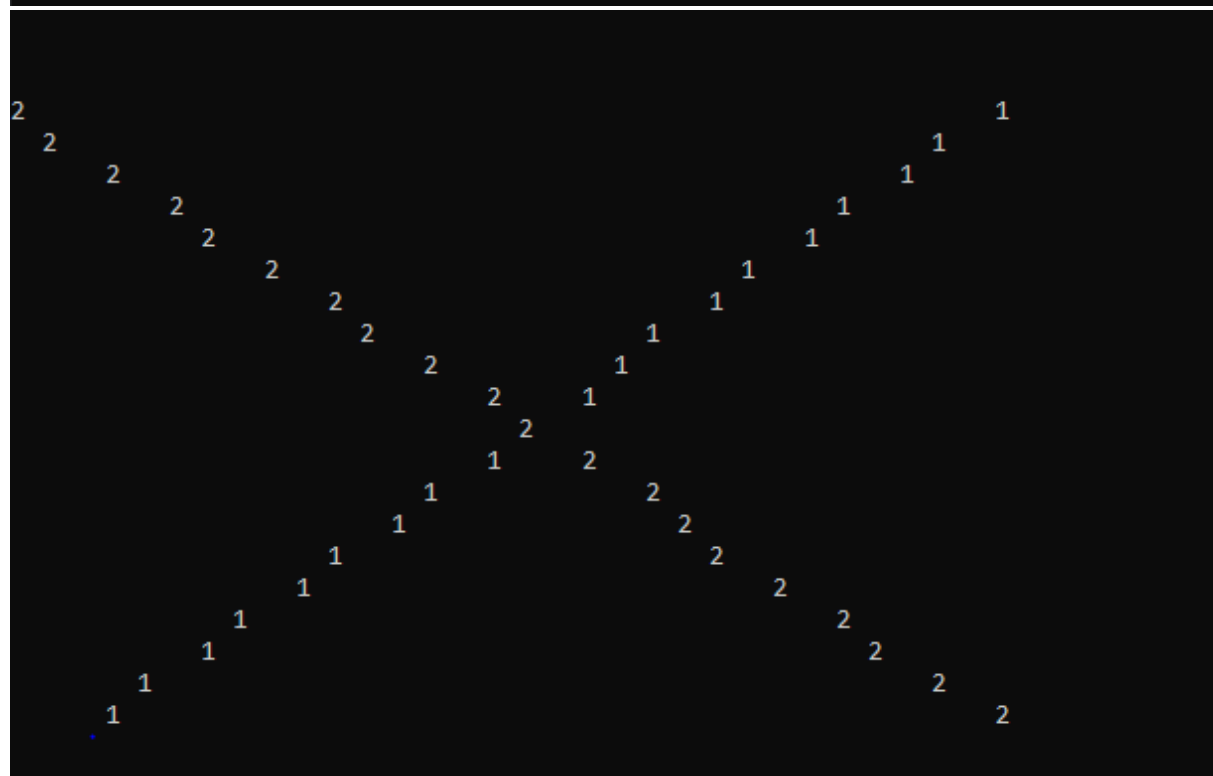
Solving using Matrix Multiplication Method:
[X = inverse(A)B]

The value of determinant = -19
The value of resultant A inverse is:
0.16    0.11
0.26   -0.16

The value of B is:
7
37
The value of resultant matrix is:
5.00
-4.00

The calculated value of x is = 5.00
The calculated value of y is = -4.00

The solution using both the methods match!
```



## Output - 2:

The equations should be in the format of:

$$ax + by = c \text{ and}$$

$$px + qy = r$$

Enter a, b, c, p, q, r: 1 -1 -3 2 -1 -5

The provided equations are:

$$1x - 1y = -3$$

$$2x - 1y = -5$$

Solving using Substitution Method:

The calculated value of x is = -2.00

The calculated value of y is = 1.00

Solving using Matrix Multiplication Method:

$$[X = \text{inverse}(A)B]$$

The value of determinant = 1

The value of resultant A inverse is:

-1.00 1.00

-2.00 1.00

The value of B is:

-3

-5

The value of resultant matrix is:

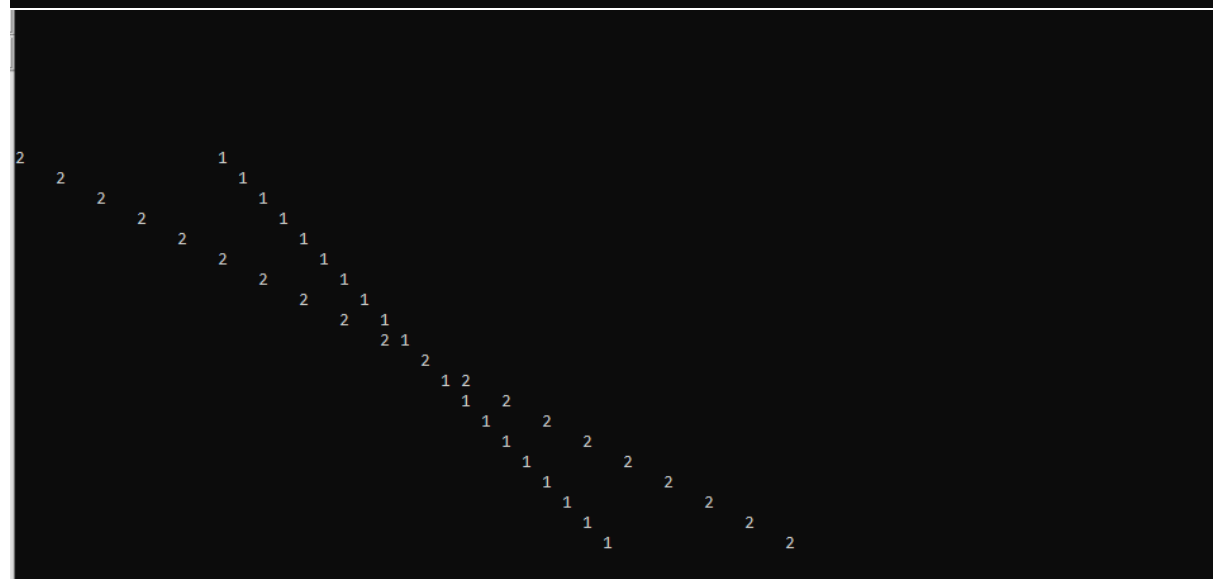
-2.00

1.00

The calculated value of x is = -2.00

The calculated value of y is = 1.00

The solution using both the methods match!



**Output -3:**

```
The equations should be in the format of:
    ax + by = c and
    px + qy = r
Enter a, b, c, p, q, r: 1 -2 3 1 -2 7
The provided equations are:
    1x - 2y = 3
    1x - 2y = 7

The lines are parallel and solution doesn't exist
```