

```

1  #include <iostream>
2
3  using namespace std;
4  const int N = 3 ;
5
6  int countNonZero (int A[N][N] ) {
7      int count = 0;
8
9      for (int i = 0; i < N; i++) {
10         for (int j = 0; j < N; j++) {
11             if (A[i][j] != 0) {
12                 count++;
13             }
14         }
15     }
16
17     return count;
18 }
19 int multidiagonal (int A[N][N])
20 {
21     int product = 1 ;
22     for (int i = 0; i < N; i++)
23     {
24         product *= A[i][i];
25     }
26     return product ;
27 }
28
29
30 int main()
31 {
32     int A [N][N] ;
33     cout << "Enter the square matrix elements of size " << N << endl;
34     for (int i = 0; i < N; i++) {
35         for (int j = 0; j < N; j++) {
36             cin >> A[i][j];
37         }
38     }
39     cout << "No of non zero values in this matrix equals " << countNonZero(A) << endl ;
40
41     cout << "Result of multiplication of diagonal of this matrix equals "<<multidiagonal(A) << endl ;
42
43
44
45
46     return 0;
47 }
48

```