```c
1   #include<stdio.h>
2       int main(){
3
4       int i,j,r,c;
5       printf("Enter number of rows : ");
6       scanf("%d", &r);
7
8       printf("Enter number of columns : ");
9       scanf("%d", &c);
10
11      int matrix[r][c],sum_row=0,sum_column=0;
12
13      printf("Enter elements of matrix: \n");
14      for(i=0;i<r;i++){
15          for(j=0;j<c;j++){
16              printf("Enter element for Row: %d and Col: %d = ",i+1,j+1);
17              scanf("%d", &matrix[i][j]);
18          }
19      }
20
21
22      printf("\n Matrix is: \n\n");
23      for(i=0;i<r;i++){
24          for(j=0;j<c;j++)
25              printf("\t%d",matrix[i][j]);
26
27          printf("\n\n");
28      }
29
30
31      printf("\n The Lower Triangular Matrix is: \n\n");
32
33      for(i=0;i<r;i++){
34          for(j=0;j<c;j++){
35              if(i>=j){
36                  printf("\t%d",matrix[i][j]);
37              }
38              else{
39                  printf("\t0");
40              }
41
42          }
43          printf("\n\n");
44
45      }
46      printf("\n\n");
47
48      printf("\n The Upper Triangular Matrix is: \n\n");
49
50      for(i=0;i<r;i++){
51          for(j=0;j<c;j++){
52              if(i>j){
53                  printf("\t0");
54
55              }
56              else{
57                  printf("\t%d",matrix[i][j]);
58              }
59
60          }
61          printf("\n\n");
62
63      }
64      printf("\n\n");
65
66
67      return 0;
```

```
68
69    }
```