```cpp
#include <iostream>
using namespace std ;

int main ()
{
    const int MAX_FIL = 100 , MAX_COL = 100 , MAX = 100;
    int m[MAX_FIL][MAX_COL] , util_fil , util_col  , i , j , util_v , izda , tmp ;
    bool cambio = true ;
    int v[MAX] , menor , suma , fila ;


    do{
        cout << "Introducir numero de filas : " ;
        cin >> util_fil ;
    }while( (util_fil > MAX_FIL ) || ( util_fil < 1 ) )  ;


    do{
        cout << "Introducir numero de columnas : " ;
        cin >> util_col ;
    }while( (util_col > MAX_COL ) || ( util_col < 1 ) )  ;


    for ( i = 0 ; i < util_fil ; i++)
    {
        for( j = 0 ; j < util_col ; j++)
        {
            cout << "Introducir elemento " << i + 1 << " de la columna " << j + 1  << " : " ;
            cin >> m[i][j]  ;
        }
    }

    cout<<"La matriz inicial es: "<<endl;

        for(int i=0;i<util_fil;i++){
            cout<<"| ";
            for(int j=0;j<util_col;j++){
                cout << m[i][j]<<" ";
            }
            cout<<"|"<<endl;
        }

    do{
        cout << "Introducir numero de elementos del vector : " ;
```

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45:         cin >> util_v ;
46:     }while( (util_v > MAX ) || ( util_v < 1 ) )  ;
47:
48:     for ( i = 0 ; i < util_v ; i ++)
49:     {
50:         cout << "Introducir elemento " << i + 1 << " del vector : "
    ;
51:         cin >> v[i] ;
52:     }
53:
54:     for ( izda = 0 ; izda < util_v && cambio ; izda++)
55:     {
56:         cambio = false ;
57:
58:         for ( i = util_v - 1 ; i > izda ; i--)
59:         {
60:             if ( v[i] < v[i-1] )
61:             {
62:                 cambio = true ;
63:                 tmp = v[i] ;
64:                 v[i] = v[i-1] ;
65:                 v[i-1] = tmp ;
66:             }
67:         }
68:     }
69:
70:     cout << "\n El vector ordenado es: \n" << endl ;
71:     for ( i = 0 ; i < util_v ; i++ )
72:     {
73:         cout << v[i] <<" ";
74:     }
75:
76:     for ( int i = 0 ; i < util_fil ; i++)
77:         {
78:             menor = menor + m[0][i] ;
79:             fila = 0 ;
80:         }
81:
82:     for(int i=0;i<util_fil;i++)
83:     {
84:         suma = 0 ;
85:
86:         for(int j=0;j<util_col;j++)
87:         {
88:             suma = suma + m[i][j] ;
89:         }
```

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 90:
 91:         if( menor > suma )
 92:         {
 93:             menor = suma ;
 94:             fila = i ;
 95:         }
 96:
 97:     }
 98:
 99:     for ( int i = 0 ; i < util_v ; i++)
100:         {
101:             m[fila][i] = v[i] ;
102:         }
103:
104:     cout<<"\n La matriz finalizada es: "<<endl;
105:
106:         for(int i=0;i<util_fil;i++){
107:             cout<<"| ";
108:             for(int j=0;j<util_col;j++){
109:                 cout << m[i][j]<<" ";
110:             }
111:             cout<<"|"<<endl;
112:         }
113: }
114:
```