

```

1  #include<stdio.h>
2  int main()
3  {
4      int m,n;
5      scanf("%d%d",&m,&n);
6      int i,j;
7      int mat1[m][n],mat2[m][n],mat3[m][n];
8      for(i=0;i<m;i++)
9      {
10         for(j=0;j<n;j++)
11             scanf("%d",&mat1[i][j]);
12     }
13     for(i=0;i<n;i++)
14     {
15         for(j=0;j<n;j++)
16             scanf("%d",&mat2[i][j]);
17     }
18     for(i=0;i<m;i++)
19     {
20         for(j=0;j<n;j++)
21         {
22             mat3[i][j]=mat1[i][j]+mat2[i][j];
23         }
24     }
25     for(i=0;i<m;i++)
26     {
27         for(j=0;j<n;j++)
28             printf("%d",mat3[i][j]);
29         printf("\n");
30     }
31     return 0;
32 }
33
34

```



C

Demo.c



CODE

OUTPUT

```
1 #include<stdio.h>
2 int main()
```

INPUT

If your program needs any run time inputs, please add it here. Use new lines for more than one input.

2 2

1 2 3 4

2 3 4 5



Show Always



Save Input

CANCEL

RUN

TAB

{

}

(

)

"

&

RUN



C

Demo.c

CODE

OUTPUT

35

79

```

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5      scanf("%d%d",&m,&n);
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7      int mat1[m][n],mat2[m][n],mat3[m][n];
8      for(i=0;i<m;i++)
9      {
10         for(j=0;j<n;j++)
11             scanf("%d",&mat1[i][j]);
12     }
13     for(i=0;i<n;i++)
14     {
15         for(j=0;j<n;j++)
16             scanf("%d",&mat2[i][j]);
17     }
18     for(i=0;i<m;i++)
19     {
20         for(j=0;j<n;j++)
21         {
22             mat3[i][j]=mat1[i][j]-mat2[i][j];
23         }
24     }
25     for(i=0;i<m;i++)
26     {
27         for(j=0;j<n;j++)
28             printf("%d",mat3[i][j]);
29         printf("\n");
30     }
31     return 0;
32 }
33
34

```



C

Demo.c



CODE

OUTPUT

```
1 #include<stdio.h>
2 int main()
```

INPUT

If your program needs any run time inputs, please add it here. Use new lines for more than one input.

```
2 2
5 6 7 8
1 2 3 4
```



Show Always



Save Input

CANCEL

RUN

TAB

{

}

(

)

"

&

RUN

44

44

Name :- Pooja R Talekar

USN :- 4AL19CSD62

Write a C program to implement matrix addition and subtraction.

Algorithm of Matrix Addition :-

Step 1 :- Start

Step 2 :- Input the order of matrix

Step 3 :- Input matrix 1 elements

Step 4 :- Input matrix 2 elements

Step 5 :- Repeat from $i=0$ to n

Step 6 :- Repeat from $j=0$ to n

Step 7 :- $mat3[i][j] = mat1[i][j] + mat2[i][j]$

Step 8 :- print mat 3

Step 9 :- Stop.

Algorithm for Matrix Subtraction

Step 1 :- Start

Step 2 :- Input order of matrix

Step 3 :- Input matrix 1 elements

Step 4 :- Input matrix 2 elements

Step 5 :- Repeat from $i=0$ to n

Step 6 :- Repeat from $j=0$ to n

Step 7 :- $mat3[i][j] = mat1[i][j] - mat2[i][j]$

Step 8 :- print mat 3

Step 9 :- Stop

Flowchart

