

1.WAP to read n elements into 2 D Array and print them on screen

Program

```
#include <stdio.h>

void main()
{
    int a[10][10],i,j,m,n;
    printf("Enter Array Size:");
    scanf("%d%d",&m,&n);

    printf("Enter %d Elements:",m*n);
    for(i=0;i<m;i++)
        for(j=0;j<n;j++)
            scanf("%d",&a[i][j]);

    printf("Array Elements:\n");
    for(i=0;i<m;i++){
        for(j=0;j<n;j++)
            printf("%5d",a[i][j]);
        printf("\n");
    }
}
```

2.WAP to read n elements into an 2D Array and find the addition, multiplication, subtraction

a

10	20	30
40	50	60
70	80	90

b

1	2	3
4	5	6
7	8	9

c

11	22	33
44	55	66
77	88	99

3 arrays

a[10][10]
b[10][10]
c[10][10]

Program

```
#include <stdio.h>

void main()
{
    int a[10][10],b[10][10],c[10][10],i,j,m,n;
    printf("Enter Array Size:");
    scanf("%d%d",&m,&n);

    printf("Enter %d Elements Into Array A:",m*n);
    for(i=0;i<n;i++)
        for(j=0;j<m;j++)
            scanf("%d",&a[i][j]);

    printf("Enter %d Elements Into Array B:",m*n);
    for(i=0;i<n;i++)
        for(j=0;j<m;j++)
            scanf("%d",&b[i][j]);

    for(i=0;i<n;i++)
        for(j=0;j<m;j++)
```

```
c[i][j]=a[i][j]+b[i][j];
```

```
printf("Addition of Array is:\n");
```

```
for(i=0;i<m;i++){
```

```
    for(j=0;j<m;j++){
```

```
        printf("%5d",c[i][j]);
```

```
    printf("\n");
```

```
}
```

```
}
```

3.WAP to read n number of elements into 2D Array and find the lower diagonal of the array

i>=j

	0	1	2
0	1	0	0
1	1	1	0
2	1	1	1

m==n

i		j
0	=	0
1	>	0
2	>	0
1	=	1
2	>	1
2	=	2

Program

```
#include <stdio.h>
```

```
void main()
```

```
{
```

```
    int a[10][10],i,j,m,n;
```

```
    printf("Enter Array Size:");
```

```
    scanf("%d%d",&m,&n);
```

```
    if(m==n)
```

```
    {
```

```
        for(i=0;i<m;i++){
```

```
            for(j=0;j<n;j++){
```

```
                {
```

```
                    if(i>=j)
```

```
                        a[i][j]=1;
```

```
                    else
```

```
                        a[i][j]=0;
```

```
                }
```

```
            printf("Lower Diagnol Array Is:\n");
```

```
            for(i=0;i<m;i++){
```

```
                for(j=0;j<n;j++){
```

```
                    printf("%5d",a[i][j]);
```

```
                printf("\n");
```

```
            }
```

```
        }
```

```
    else
```

```
        printf("Lower Diagnol array is Possible Only Square matrix");
```

```
}
```

