

print the sum of all diagonal elements.

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

```
void main()
```

```
{
```

```
    int arr1[3][3],i,j;
```

```
    printf("\n\nRead a 2D array of size  
3x3 and print the matrix :\n");
```

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

```
/* Stored values into the array*/
```

```
    printf("Input elements in the  
matrix :\n");
```

```
    for(i=0;i<3;i++)
```

```
    {
```

```
        for(j=0;j<3;j++)
```

```
        {
```

```
            printf("element -  
[%d],[%d] : ",i,j);
```

```
scanf("%d",&arr1[i][j]);
```

```
}
```

```
}
```

```
printf("\nThe matrix is : \n");
```

```
for(i=0;i<3;i++)
```

```
{
```

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

```
{  
    printf("\n");  
    for(j=0;j<3;j++)  
        printf("%d\t",arr1[i][j]);  
    }  
    printf("\n\n");  
}
```

OUTPUT:element - [0],[0] : 1

element - [0],[1] : 2

element - [0],[2] : 3

element - [1],[0] : 4

element - [1],[1] : 5

element - [1],[2] : 6

element - [2],[0] : 7

element - [2],[1] : 8

element - [2],[2] : 9

The matrix is :

1	2	3
4	5	6
7	8	9