

Extra 1

```
//Extra 1. C program to print Pascal's triangle.  
#include <stdio.h>  
int main()  
{  
    int i,j,k,x=1,n=7;  
    for(i=0;i<n;i++)  
    {  
        for(j=0;j<n-i;j++)  
        printf(" ");  
        for(k=0;k<=i;k++)  
        {  
            if(k==0 || i==0)  
                x=1;  
            else  
                x = x*(i-k+1)/(k);  
            printf("%3d",x);  
        }  
        printf("\n");  
    }  
}
```

```
      1  
     1 1  
    1 2 1  
   1 3 3 1  
  1 4 6 4 1  
 1 5 10 10 5 1  
1 6 15 20 15 6 1
```

Extra 2

```
//Extra 2. Develop a program to print the transpose of a matrix.
#include<stdio.h>
int main()
{
    int n,m,i,j;
    printf("Enter number of rows : ");
    scanf("%d",&n);
    printf("Enter number of columns : ");
    scanf("%d",&m);
    int arr1[n][m],arr2[m][n];
    printf("Enter matrix : \n");
    for(i=0;i<n;i++){
        for(j=0;j<m;j++){
            scanf("%d",&arr1[i][j]);
        }
    }
    for(i=0;i<n;i++){
        for(j=0;j<m;j++){
            arr2[j][i]=arr1[i][j];
        }
    }
    for(i=0;i<m;i++){
        for(j=0;j<n;j++){
            printf("%2d",arr2[i][j]);
        }
        printf("\n");
    }
}
```

```
Enter number of rows : 3
Enter number of columns : 3
Enter matrix :
1 2 3
4 5 6
7 8 9
 1 4 7
 2 5 8
 3 6 9
```