

```
#include<iostream>
```

```
using namespace std;
```

```
int main()
```

```
{
```

```
/*
```

```
//1=====
```

```
int i,j;
```

```
for(i=0;i<3;i=i+1)
```

```
{
```

```
for(j=0;j<5;j=j+1)
```

```
{
```

```
cout<<" * ";
```

```
}
```

```
cout<<endl;
```

```
}
```

```
//-----output-----
```

```
* * * * *
```

```
* * * * *
```

```
* * * * *
```

```
//2=====
```

```
cout<<"entrer a number :";
```

```
int a,i,j;
```

```
cin>>a;
```

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

```
{
```

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

```

    {
        cout<<" * ";

    }
    cout<<endl;
}
//-----output-----
* * * * *
* * * * *
* * * * *
* * * * *
* * * * *

//3=====
cout<<"enter the number:";
int n;
cin>>n;
for(int row=0;row<n; row++){
    for(int col=0; col<n; col++){
        if(row==0|| row==n-1||col==0||col==n-1){
            cout<<"* ";
        }
        else{
            cout<<" ";
        }
    }
    cout<<endl;
}
//-----output-----
enter the number:5
* * * * *
*      *
*      *

```

```
*      *
*****
```

```
//4=====
cout<<"enter row and coiums";
int r,c;
cin>>r;
cin>>c;
for(int row=0; row<r; row=row+1){
    if(row == 0 || row == r-1){
        for(int col=0; col<c; col++){
            cout<< "* ";
        }
    }
    else{
        cout<< "* ";
        for(int i=0; i<c-2; i=i+1){
            cout<< " ";
        }
        cout<< "* ";
    }
    cout << endl;
}
//-----output-----
enter row and coiums 5
10
*****
*          *
*          *
*          *
*****
```

```
//5===== new program haif trigel=====
```

```
cout<<"enter a number";
```

```
int a;
```

```
cin>>a;
```

```
for(int row=0;row<a;row++)
```

```
{
```

```
    for(int col=0;col<row+1;col++){
```

```
        cout<<" * ";
```

```
    }
```

```
    cout<<endl;
```

```
}
```

```
//-----output-----
```

```
enter a number5
```

```
*
```

```
* *
```

```
* * *
```

```
* * * *
```

```
* * * * *
```

```
//6=====revers trangals=====
```

```
cout<<"enter a numeber :";
```

```
int a;
```

```
cin>>a;
```

```
for(int row=0;row<a;row++)
```

```
{
```

```
    for(int col=0;col<a-row;col++)
```

```
    {
```

```
        cout<<"* ";
```

```

    }
    cout<<endl;
}
//-----output-----
enter a numeber :5
* * * * *
* * * *
* * *
* *
*

```

```

//7=====number trees =====
cout<<"enter a number:";
int a;
cin>>a;
for( int row=0; row<a; row++){
    for( int col=0; col<a-row; col++){
        cout<< col+1 ;
    }
    cout<<endl;
}
//-----output-----
enter a number:5
12345
1234
123
12
1

```

```

//8===== number tree=====
cout<<"enter a number:";

```

```
int a;
cin>>a;
for( int row=0; row<a; row++){
    for( int col=0; col<row+1; col++){
        cout<< col+1 ;
    }
    cout<<endl;
}
//-----OUTPUT-----
enter a number:5
1
12
123
1234
12345
```

```
//9=====piramid =====
cout<<"enter a number:";
int n ;
cin>>n;
for(int row=0; row<n; row++){
    for(int col=0; col<n-row; col++){
        cout<<" ";
    }
    for(int col=0; col<row+1; col++){
        cout<<"* ";
    }
    cout<<endl;
}
//-----output-----
enter a number:5
```

```

*
* *
* * *
* * * *
* * * * *

```

//10=====INNVERTERD PRIMIDS=====

```

cout<<"enter a number:";
int n;
cin>>n;
for(int row=0; row<n; row++){
    for(int col=0; col<row+1; col++){
        cout<<" ";
    }
    for(int col=0; col<n-row; col++){
        cout<<"* ";
    }
    cout<<endl;
}

```

//-----output-----

enter a number:5

```

* * * * *
* * * *
* * *
* *
*

```

//11=====diamand =====

cout<<"enter the number .:";

```

int a;
cin>>a;
for(int row=0;row<a; row++){
    for(int col=0; col<a-row; col++){
        cout<<" ";
    }
    for(int col=0; col<row+1; col++){
        cout<<"* ";
    }
    cout<<endl;
}
for(int row=0;row<a; row++){
    for(int col=0; col<row+1; col++){
        cout<<" ";
    }
    for(int col=0; col<a-row; col++){
        cout<<"* ";
    }
    cout<<endl;
}

```

//-----output-----

enter the number :5

```

*
* *
* * *
* * * *
* * * * *
* * * * *
* * * * *
* * * *
* * *
* *
*

```



```
//12===== holo DIAMAND =====
```

```
cout<<"enter the number:";
```

```
int n;
```

```
cin>>n;
```

```
for(int row=0; row<n; row++){
```

```
    //for spaces
```

```
    for(int col=0; col<n-row-1; col++){
```

```
        cout<<" ";
```

```
    }
```

```
    //for star
```

```
    for(int col=0; col<2*row+1; col++){
```

```
        if(col==0) {cout<<"* ";
```

```
        else if(col==2*row ) { cout<<"* ";
```

```
        else{ cout<<" ";
```

```
    }
```

```
    cout<<endl;
```

```
}
```

```
for(int row=0; row<n; row++){
```

```
    for(int col=0 ;col<row; col++){
```

```
        cout<<" ";
```

```
    }
```

```
    for(int col=0; col<2*n-2*row-1; col++){
```

```
        if(col==0||col==2*n-2*row-2){
```

```
            cout<<"* ";
```

```
        }
```

```
    else{
```

```
        cout<<" ";
```

```
    }
```

```
}
```

```
cout<<endl;
```

```
}
```

```
//----output-----
```

```
enter the number:5
```

```
  *
 * *
*   *
*     *
*       *
*         *
*           *
*             *
*               *
*                 *
```

```
//13===== full doimand outer hole diamnd=====
```

```
cout<<"enter a number :";
```

```
int n;
```

```
cin>>n;
```

```
for(int row=0; row<n; row++){
    for(int col=0; col<n-row; col++){
        cout<<"*";
    }
    for(int col=0; col<2*row+1; col++){
        cout<<" ";
    }
    for(int col=0; col<n-row; col++){
        cout<<"*";
    }
    cout<<endl;
}
for(int row=0;row<n; row++){
```

```

for(int col=0;col<row+1; col++){
    cout<<"*";
}
for(int col=0;col<2*n-2*row-1; col++){
    cout<<" ";
}
for(int col=0;col<row+1; col++){
    cout<<"*";
}
cout<<endl;
}

```

//-----output-----

enter a number :5

***** *****

***** *****

*** ***

** **

* *

* *

** **

*** ***

***** *****

***** *****

//14=====

cout<<"enter a number:";

int n;

cin>>n;

```

for(int row=0; row<n; row++){
    for(int col=0; col<row+1; col++){

```

```

        cout<<row+1;
        if(col !=row){
            cout<<"*";
        }
    }
    cout<<endl;
}
for(int row=0; row<n; row++){
    for(int col=0; col<n-row; col++){
        cout<<n-row;
        if(col !=n-row-1){
            cout<<"*";
        }
    }
    cout<<endl;
}

```

//----- out put-----

```

1
2*2
3*3*3-->

```

//15=====

```

cout<<"enter a value :";
int n;
cin>>n;

```

```

for(int row=0; row<n; row++){
    int col;
    for( col=0; col<row+1; col++){
        int ans=col+1;
        char ch=ans+'A'-1;
        cout<<ch;
    }
}

```

```

}
for(col=col-1; col>=1; col--){
    int ans=col;
    char ch=ans+'A'-1;
    cout<< ch;
}
cout<<endl;
}

```

-----output-----

```

A
ABA
ABCBA
ABCD CBA

```

//16=====FULL PRIAMISD WITH NUMBER =====

```

cout<<"enter a number :";
int n;
cin>>n;

```

```

for(int row=0; row<n; row++){

    for(int col=0; col<row+1; col++){
        cout<<col+row+1<<" ";

    }
    cout<<endl;
}

```

//-----out put -----

```

1
23
345
4567

```

```
//17===== or with full primid number =====
```

```
cout<<"enter the number :";
int n ;
cin>>n;
for(int row=0; row<n; row++){
    for(int col=0; col<n-row; col++){
        cout<<" ";
    }
    for(int col=0; col<row+1; col++){
        cout<<col+row+1<<" ";
    }
}
```

```
    cout<<endl;;
}
// -----out put -->-----
enter the number :5
1
2 3
3 4 5
4 5 6 7
5 6 7 8 9
```

```
//18===== NUW ROGRAM WITH THE NUMBER =====
```

```
cout<<"enter the number :";
```

```

int n ;
cin>>n;
for(int row=0; row<n; row++){
    for(int col=0; col<n-row; col++){
        cout<<" ";
    }
    for(int col=0; col<row+1; col++){
        cout<<col+row+1<<" ";

    }
    int l=2*row;
    for(int col=0; col<row; col++){
        cout<<l<<" ";
        l--;
    }

```

```

        cout<<endl;;
    }
//-----OUTPUT-----
        enter the number :5
            1
          2 3 2
        3 4 5 4 3
      4 5 6 7 6 5 4
    5 6 7 8 9 8 7 6 5

```

//19=====holo priamid with number=====

```

cout<<"enter a number :";
int n;
cin>>n;

```

[illegible]

```
//20=====holow inverted half primid=====
```



```
cin>>n;
```

```
int row,col;
for( row=0; row<n; row++){
    for(col=0; col<n-row; col++){
        if(row==0|| row==n-1){
            cout<<"* ";

        }
        else if(col==0 ||col==n-row-1){
            cout<<"* ";

        }
        else{
            cout<<" ";
        }
    }
    cout<<endl;
}
```

```
//-----out put -----
```

```
enter a number :5
```

```
* * * * *
```

```
*   *
```

```
*  *
```

```
* *
```

```
*
```

```
//21=====half doamand=====
```

```
cout<<"enter the number:";
```

```
int n;
```

```
cin>>n;
```

```
for(int row=0; row<n; row++){  
    for(int col=0; col<row+1; col++){  
        cout<<"* ";  
    }  
    cout<<endl;  
}  
for(int row=0; row<n; row++){  
    for(int col=0; col<n-row-1; col++){  
        cout<<"* ";  
    }  
    cout<<endl;  
}
```

```
//-----output-----
```

```
enter the number:5
```

```
*  
* *  
* * *  
* * * *  
* * * * *  
* * * *  
* * *  
* *  
*  
*      */
```

```
}//
```

