Patterns:  
  
1.  
**package** Patterns;

**import** java.util.\*;

**public** **class** Pattern1 {

**public** **static** **void** main(String[] args) {

Scanner sc=**new** Scanner(System.***in***);

**int** n=sc.nextInt();

**int** i=0;

**while**(i<n)

{

**int** j=0;

**while**(j<n)

{

System.***out***.print("\*");

j++;

}

i++;

System.***out***.println();

}

}

}

2.

**package** Patterns;

**import** java.util.\*;

**public** **class** Pattern2 {

**public** **static** **void** main(String[] args) {

// **TODO** Auto-generated method stub

Scanner sc=**new** Scanner(System.***in***);

**int** n=sc.nextInt();

**int** row=1;

**while**(row<=n)

{

**int** star=1;

**while**(star<=row)

{

System.***out***.print("\*");

star++;

}

System.***out***.println();

row++;

}

}

}

3.

**package** Patterns;

**import** java.util.\*;

**public** **class** Pattern3 {

**public** **static** **void** main(String[] args) {

Scanner sc=**new** Scanner(System.***in***);

**int** n=sc.nextInt();

**int** row=1;

**int** numstar=n;

**while**(row<=n)

{

**int** cst=1;

**while**(cst<=numstar)

{

System.***out***.print("\*");

cst++;

}

numstar--;

System.***out***.println();

row++;

}

// **TODO** Auto-generated method stub

}

}

4.

**package** Patterns;

**import** java.util.\*;

**public** **class** Pattern4 {

**public** **static** **void** main(String[] args) {

Scanner sc=**new** Scanner(System.***in***);

**int** n=sc.nextInt();

**int** row=1;

**int** numstar=1;

**int** numspc=n-1;

**while**(row<=n)

{

**int** csp=1;

**while**(csp<=numspc)

{

System.***out***.print(" ");

csp++;

}

**int** cst=1;

**while**(cst<=numstar)

{

System.***out***.print("\*");

cst++;

}

System.***out***.println();

row++;

numstar++;

numspc--;

}

// **TODO** Auto-generated method stub

}

}

5.

**package** Patterns;

**import** java.util.\*;

**public** **class** Pattern5 {

**public** **static** **void** main(String[] args) {

Scanner sc=**new** Scanner(System.***in***);

**int** n=sc.nextInt();

**int** row=1;

**int** numstar=n;

**int** numspc=1;

**while**(row<=n)

{

**int** csp=1;

**while**(csp<numspc)

{

System.***out***.print(" ");

csp++;

}

**int** cst=1;

**while**(cst<=numstar)

{

System.***out***.print("\*");

cst++;

}

row++;

System.***out***.println();

numstar--;

numspc++;

}

// **TODO** Auto-generated method stub

}

}

6.

**package** Patterns;

**import** java.util.\*;

**public** **class** Pattern6 {

**public** **static** **void** main(String[] args) {

Scanner sc=**new** Scanner(System.***in***);

**int** n=sc.nextInt();

**int** row=1;

**int** numstar=n;

**int** numspc=1;

**while**(row<=n)

{

**int** csp=1;

**while**(csp<numspc)

{

System.***out***.print(" ");

csp++;

}

**int** cst=1;

**while**(cst<=numstar)

{

System.***out***.print("\*");

cst++;

}

row++;

System.***out***.println();

numstar--;

numspc+=2;;

}

// **TODO** Auto-generated method stub

}

}

7.

**package** Patterns;

**import** java.util.\*;

**public** **class** Pattern7 {

**public** **static** **void** main(String[] args) {

// **TODO** Auto-generated method stub

Scanner sc=**new** Scanner(System.***in***);

**int** n=sc.nextInt();

**int** row=1;

**while**(row<=n)

{

**int** clmn=1;

**while**(clmn<=n)

{

**if**(row==1 || row==n || clmn==1 || clmn==n)

System.***out***.print("\* ");

**else**

System.***out***.print(" ");

clmn++;

}

row++;

System.***out***.println();

}

}

}

8.

**package** Patterns;

**import** java.util.\*;

**public** **class** Pattern8 {

**public** **static** **void** main(String[] args) {

// **TODO** Auto-generated method stub

Scanner sc=**new** Scanner(System.***in***);

**int** n=sc.nextInt();

**int** row=1;

**while**(row<=n)

{

**int** clmn=1;

**while**(clmn<=n)

{

**if**(row==clmn || row+clmn==n+1)

System.***out***.print("\* ");

**else**

System.***out***.print(" ");

clmn++;

}

row++;

System.***out***.println();

}

}

}

9.

**package** Patterns;

**import** java.util.\*;

**public** **class** Pattern9 {

**public** **static** **void** main(String[] args) {

// **TODO** Auto-generated method stub

Scanner sc=**new** Scanner(System.***in***);

**int** n=sc.nextInt();

**int** row=1;

**int** numstar=1;

**int** numspc=n-1;

**while**(row<=n)

{

**int** cspc=1;

**while**(cspc<=numspc)

{

System.***out***.print(" ");

cspc++;

}

**int** cstar=1;

**while**(cstar<=(2\*numstar-1))

{

System.***out***.print("\*");

cstar++;

}

System.***out***.println();

row++;

numstar++;

numspc--;

}

}

}

10.

**package** Patterns;

**import** java.util.\*;

**public** **class** Pattern10 {

**public** **static** **void** main(String[] args) {

// **TODO** Auto-generated method stub

Scanner sc=**new** Scanner(System.***in***);

**int** n=sc.nextInt();

**int** row=1;

**int** numstar=(2\*n-1);

**int** numspc=0;

**while**(row<=n)

{

**int** cspc=0;

**while**(cspc<numspc)

{

System.***out***.print(" ");

cspc++;

}

**int** cstr=1;

**while**(cstr<=numstar)

{

System.***out***.print("\*");

cstr++;

}

row++;

System.***out***.println();

numstar-=2;

numspc++;

}

}

}

11.

**package** Patterns;

**import** java.util.\*;

**public** **class** Pattern11 {

**public** **static** **void** main(String[] args) {

// **TODO** Auto-generated method stub

Scanner sc=**new** Scanner(System.***in***);

**int** n=sc.nextInt();

**int** row=1;

**int** numstar=1;

**int** numspc=n-1;

**while**(row<=n)

{

**int** cspc=1;

**while**(cspc<=numspc)

{

System.***out***.print(" ");

cspc++;

}

**int** cstar=1;

**while**(cstar<=(2\*numstar-1))

{

**if**(cstar%2==0)

System.***out***.print(" ");

**else**

System.***out***.print("\*");

cstar++;

}

System.***out***.println();

row++;

numstar++;

numspc--;

}

}

}

12.

**package** Patterns;

**import** java.util.\*;

**public** **class** Pattern12 {

**public** **static** **void** main(String[] args) {

// **TODO** Auto-generated method stub

Scanner sc=**new** Scanner(System.***in***);

**int** n=sc.nextInt();

**int** row=1;

**int** numstar=1;

**int** numspc=n-1;

**while**(row<=n)

{

**int** cspc=1;

**while**(cspc<=numspc)

{

System.***out***.print(" ");

cspc++;

}

**int** cstar=1;

**while**(cstar<=(2\*numstar-1))

{

**if**(cstar%2==0)

System.***out***.print("!");

**else**

System.***out***.print("\*");

cstar++;

}

System.***out***.println();

row++;

numstar++;

numspc--;

}

}

}

13.

**package** Patterns;

**import** java.util.\*;

**public** **class** Pattern13 {

**public** **static** **void** main(String[] args) {

// **TODO** Auto-generated method stub

Scanner sc=**new** Scanner(System.***in***);

**int** n=sc.nextInt();

**int** row=1;

**int** numstar=1;

**while**(row<=(2\*n-1))

{

**int** cstar=1;

**while**(cstar<=numstar)

{

System.***out***.print("\*");

cstar++;

}

row++;

System.***out***.println();

**if**(row<=n)

numstar++;

**else**

numstar--;

}

}

}

14.

**package** Patterns;

**import** java.util.\*;

**public** **class** Pattern14 {

**public** **static** **void** main(String[] args) {

// **TODO** Auto-generated method stub

Scanner sc=**new** Scanner(System.***in***);

**int** n=sc.nextInt();

**int** row=1;

**int** numstar=1;

**int** numspace=n-1;

**while**(row<=2\*n-1)

{

**int** cspc=1;

**while**(cspc<=numspace)

{

cspc++;

System.***out***.print(" ");

}

**int** cstar=1;

**while**(cstar<=numstar)

{

System.***out***.print("\*");

cstar++;

}

row++;

System.***out***.println();

**if**(row<=n)

{

numstar++;

numspace--;

}

**else**

{

numstar--;

numspace++;

}

}

}

}

15.

**package** Patterns;

**import** java.util.\*;

**public** **class** Pattern15 {

**public** **static** **void** main(String[] args) {

// **TODO** Auto-generated method stub

Scanner sc=**new** Scanner(System.***in***);

**int** n=sc.nextInt();

**int** row=1;

**int** numstar=n;

**int** numspace=0;

**while**(row<=(2\*n-1))

{

**int** cspace=0;

**while**(cspace<numspace)

{

System.***out***.print(" ");

cspace++;

}

**int** cstar=1;

**while**(cstar<=numstar)

{

System.***out***.print("\* ");

cstar++;

}

row++;

System.***out***.println();

**if**(row<=n)

{

numstar--;

numspace+=2;

}

**else**

{

numstar++;

numspace-=2;

}

}

}

}

16.

**package** Patterns;

**import** java.util.\*;

**public** **class** Pattern16 {

**public** **static** **void** main(String[] args) {

// **TODO** Auto-generated method stub

Scanner sc=**new** Scanner(System.***in***);

**int** n=sc.nextInt();

**int** row=1;

**int** numstar=n;

**int** numspace=n-1;

**while**(row<=(2\*n-1))

{

**int** cspc=1;

**while**(cspc<=numspace)

{

System.***out***.print(" ");

cspc++;

}

**int** cstar=1;

**while**(cstar<=numstar)

{

System.***out***.print("\* ");

cstar++;

}

row++;

System.***out***.println();

**if**(row<=n)

{

numstar--;

numspace--;

}

**else**

{

numstar++;

numspace++;

}

}

}

}

17.

**package** Patterns;

**import** java.util.\*;

**public** **class** Pattern17 {

**public** **static** **void** main(String[] args) {

// **TODO** Auto-generated method stub

Scanner sc=**new** Scanner(System.***in***);

**int** n=sc.nextInt();

**int** row=1;

**int** numstar=n/2;

**int** numspace=1;

**while**(row<=n)

{

**int** cstar1=1;

**while**(cstar1<=numstar)

{

System.***out***.print("\* ");

cstar1++;

}

**int** cspace=1;

**while**(cspace<=numspace)

{

System.***out***.print(" ");

cspace++;

}

**int** cstar2=1;

**while**(cstar2<=numstar)

{

System.***out***.print("\* ");

cstar2++;

}

row++;

System.***out***.println();

**if**(row<=(n/2+1))

{

numstar--;

numspace+=2;

}

**else**

{

numstar++;

numspace-=2;

}

}

}

}

18.

**package** Patterns;

**import** java.util.\*;

**public** **class** Pattern18 {

**public** **static** **void** main(String[] args) {

// **TODO** Auto-generated method stub

Scanner sc=**new** Scanner(System.***in***);

**int** n=sc.nextInt();

**int** row=1;

**int** numstar=1;

**int** numspace=n/2;

**while**(row<=n)

{

**int** cspace=1;

**while**(cspace<=numspace)

{

System.***out***.print(" ");

cspace++;

}

**int** cstar=1;

**while**(cstar<=numstar)

{

System.***out***.print("\* ");

cstar++;

}

row++;

System.***out***.println();

**if**(row<=(n/2+1))

{

numstar+=2;

numspace--;

}

**else**

{

numstar-=2;

numspace++;

}

}

}

}

19.

**package** Patterns;

**import** java.util.\*;

**public** **class** Pattern19 {

**public** **static** **void** main(String[] args) {

// **TODO** Auto-generated method stub

Scanner sc=**new** Scanner(System.***in***);

**int** n=sc.nextInt();

**int** row=1;

**int** numstar=n/2+1;

**int** numspace=-1;

**while**(row<=n)

{

**int** cstar1=1;

**while**(cstar1<=numstar)

{

System.***out***.print("\* ");

cstar1++;

}

**int** cspace=1;

**while**(cspace<=numspace)

{

System.***out***.print(" ");

cspace++;

}

**int** cstar2=1;

**if**(row==1 || row==n)

cstar2=2;

**while**(cstar2<=numstar)

{

System.***out***.print("\* ");

cstar2++;

}

row++;

System.***out***.println();

**if**(row<=n/2+1)

{

numstar--;

numspace+=2;

}

**else**

{

numstar++;

numspace-=2;

}

}

}

}

20.

**package** Patterns;

**import** java.util.\*;

**public** **class** Pattern20 {

**public** **static** **void** main(String[] args) {

// **TODO** Auto-generated method stub

Scanner sc=**new** Scanner(System.***in***);

**int** n=sc.nextInt();

**int** row=1;

**int** numspace1=n/2+1;

**int** numspace2=-1;

**while**(row<=n)

{

**int** cspace1=1;

**while**(cspace1<=numspace1)

{

System.***out***.print(" ");

cspace1++;

}

System.***out***.print("\* ");

**int** cspace2=0;

**while**(cspace2<numspace2)

{

System.***out***.print(" ");

cspace2++;

}

**if**(row!=1 && row!=n)

System.***out***.print("\* ");

**else**

System.***out***.print(" ");

row++;

System.***out***.println();

**if**(row<=n/2+1)

{

numspace1--;

numspace2+=2;

}

**else**

{

numspace1++;

numspace2-=2;

}

}

}

}

21.

**package** Patterns;

**import** java.util.\*;

**public** **class** Pattern21 {

**public** **static** **void** main(String[] args) {

// **TODO** Auto-generated method stub

Scanner sc=**new** Scanner(System.***in***);

**int** n=sc.nextInt();

**int** row=1;

**int** numstar1=1;

**int** numstar2=1;

**int** numspace=(2\*n-3);

**while**(row<=n)

{

**int** cstar1=1;

**while**(cstar1<=numstar1)

{

System.***out***.print("\*");

cstar1++;

}

**int** cspace=1;

**if**(row==n)

cspace=2;

**while**(cspace<=numspace)

{

System.***out***.print(" ");

cspace++;

}

**int** cstar2=1;

**if**(row==n)

cstar2=2;

**while**(cstar2<=numstar2)

{

System.***out***.print("\*");

cstar2++;

}

row++;

System.***out***.println();

numstar1++;

numstar2++;

numspace-=2;

}

}

}

22.

**package** Patterns;

**import** java.util.\*;

**public** **class** Pattern22 {

**public** **static** **void** main(String[] args) {

// **TODO** Auto-generated method stub

Scanner sc=**new** Scanner(System.***in***);

**int** n=sc.nextInt();

**int** row=1;

**int** numstar1=n;

**int** numstar2=n;

**int** numspace=-1;

**while**(row<=n)

{

**int** cstar1=1;

**while**(cstar1<=numstar1)

{

System.***out***.print("\*");

cstar1++;

}

**int** cspace=1;

**while**(cspace<=numspace)

{

System.***out***.print(" ");

cspace++;

}

**int** cstar2=1;

**if**(row==1)

cstar2=2;

**while**(cstar2<=numstar2)

{

System.***out***.print("\*");

cstar2++;

}

row++;

System.***out***.println();

numstar1--;

numstar2--;

numspace+=2;

}

}

}

23.

**package** Patterns;

**import** java.util.\*;

**public** **class** Pattern23 {

**public** **static** **void** main(String[] args) {

// **TODO** Auto-generated method stub

Scanner sc=**new** Scanner(System.***in***);

**int** n=sc.nextInt();

**int** row=1;

**int** numspace=n-1;

**int** numstar=1;

**while**(row<=n)

{

**int** cspc=1;

**while**(cspc<=numspace)

{

System.***out***.print(" ");

cspc++;

}

**int** cstar=1;

**while**(cstar<=numstar)

{

System.***out***.print("1");

cstar++;

}

row++;

System.***out***.println();

numspace--;

numstar+=2;

}

}

}

24.

**package** Patterns;

**import** java.util.\*;

**public** **class** Pattern24 {

**public** **static** **void** main(String[] args) {

// **TODO** Auto-generated method stub

Scanner sc=**new** Scanner(System.***in***);

**int** n=sc.nextInt();

**int** row=1;

**int** numspace=n-1;

**int** numstar=1;

**while**(row<=n)

{

**int** cspc=1;

**while**(cspc<=numspace)

{

System.***out***.print(" ");

cspc++;

}

**int** cstar=1;

**while**(cstar<=numstar)

{

System.***out***.print(row);

cstar++;

}

row++;

System.***out***.println();

numspace--;

numstar+=2;

}

}

}

25.

**package** Patterns;

**import** java.util.\*;

**public** **class** Pattern25 {

**public** **static** **void** main(String[] args) {

// **TODO** Auto-generated method stub

Scanner sc=**new** Scanner(System.***in***);

**int** n=sc.nextInt();

**int** row=1;

**int** numspace=n-1;

**int** numstar=1;

**int** count=1;

**while**(row<=n)

{

**int** cspc=1;

**while**(cspc<=numspace)

{

System.***out***.print("\t");

cspc++;

}

**int** cstar=1;

**while**(cstar<=numstar)

{

System.***out***.print(count+++"\t");

cstar++;

}

row++;

System.***out***.println();

numspace--;

numstar+=2;

}

}

}

26.

**package** Patterns;

**import** java.util.\*;

**public** **class** Pattern26 {

**public** **static** **void** main(String[] args) {

// **TODO** Auto-generated method stub

Scanner sc=**new** Scanner(System.***in***);

**int** n=sc.nextInt();

**int** row=1;

**int** numspace=n-1;

**int** numstar=1;

**while**(row<=n)

{

**int** count=1;

**int** cspc=1;

**while**(cspc<=numspace)

{

System.***out***.print(" ");

cspc++;

}

**int** cstar=1;

**while**(cstar<=numstar)

{

System.***out***.print(count++);

cstar++;

}

row++;

System.***out***.println();

numspace--;

numstar+=2;

}

}

}

27.

**package** Patterns;

**import** java.util.\*;

**public** **class** Pattern27 {

**public** **static** **void** main(String[] args) {

// **TODO** Auto-generated method stub

Scanner sc=**new** Scanner(System.***in***);

**int** n=sc.nextInt();

**int** row=1;

**int** numspace=n-1;

**int** numstar=1;

**while**(row<=n)

{

**int** cspace=1;

**while**(cspace<=numspace)

{

System.***out***.print(" ");

cspace++;

}

**int** cstar=1;

**int** count=1;

**while**(cstar<=numstar)

{

**if**(cstar<row)

{

System.***out***.print(count++);

}

**else**

{

System.***out***.print(count--);

}

cstar++;

}

row++;

System.***out***.println();

numspace--;

numstar+=2;

}

}

}

28.

**package** Patterns;

**import** java.util.\*;

**public** **class** Pattern28 {

**public** **static** **void** main(String[] args) {

// **TODO** Auto-generated method stub

Scanner sc=**new** Scanner(System.***in***);

**int** n=sc.nextInt();

**int** row=1;

**int** numspace=n-1;

**int** numstar=1;

**while**(row<=n)

{

**int** count=row;

**int** cspace=1;

**while**(cspace<=numspace)

{

System.***out***.print(" ");

cspace++;

}

**int** cstar=1;

//int count=1;

**while**(cstar<=numstar)

{

**if**(cstar<row)

{

System.***out***.print(count++);

}

**else**

{

System.***out***.print(count--);

}

cstar++;

}

row++;

System.***out***.println();

numspace--;

numstar+=2;

}

}

}

29.

**package** Patterns;

**import** java.util.\*;

**public** **class** Pattern29 {

**public** **static** **void** main(String[] args) {

// **TODO** Auto-generated method stub

Scanner sc=**new** Scanner(System.***in***);

**int** n=sc.nextInt();

**int** row=1;

**int** numspace=n-1;

**int** numstar=1;

**while**(row<=n)

{

**int** count=row;

**int** cspace=1;

**while**(cspace<=numspace)

{

System.***out***.print(" ");

cspace++;

}

**int** cstar=1;

//int count=1;

**while**(cstar<=numstar)

{

**if**(cstar==numstar || cstar==1)

{

System.***out***.print(count);

}

**else**

{

System.***out***.print("0");

}

cstar++;

}

row++;

System.***out***.println();

numspace--;

numstar+=2;

}

}

}

30.

**package** Patterns;

**import** java.util.\*;

**public** **class** Pattern30 {

**public** **static** **void** main(String[] args) {

// **TODO** Auto-generated method stub

Scanner sc=**new** Scanner(System.***in***);

**int** n=sc.nextInt();

**int** row=1;

**while**(row<=n)

{

**int** clmn=1;

**int** count=n;

**while**(clmn<=n)

{

System.***out***.print(count);

clmn++;

count--;

}

System.***out***.println();

row++;

}

}

}

31.

**package** Patterns;

**import** java.util.\*;

**public** **class** Pattern31 {

**public** **static** **void** main(String[] args) {

Scanner sc=**new** Scanner(System.***in***);

**int** n=sc.nextInt();

**int** row=1;

**while**(row<=n)

{

**int** clmn=1;

**int** count=n;

**while**(clmn<=n)

{

**if**(count==row)

System.***out***.print("\*");

**else**

System.***out***.print(count);

count--;

clmn++;

}

row++;

System.***out***.println();

}

}

}

32.

**package** Patterns;

**import** java.util.\*;

**public** **class** Pattern32 {

**public** **static** **void** main(String[] args) {

// **TODO** Auto-generated method stub

Scanner sc=**new** Scanner(System.***in***);

**int** n=sc.nextInt();

**int** row=1;

**int** numstar=1;

**while**(row<=(2\*n-1))

{

**int** cstar=1;

**while**(cstar<=numstar)

{

**if**(cstar%2==0)

System.***out***.print("\*");

**else**

**if**(row>n)

System.***out***.print(numstar/2+1);

**else**

System.***out***.print(row);

cstar++;

}

row++;

System.***out***.println();

**if**(row<=n)

{

numstar+=2;

}

**else**

{

numstar-=2;

}

}

}

}

33.

**package** Patterns;

**import** java.util.\*;

**public** **class** Pattern33 {

**public** **static** **void** main(String[] args) {

// **TODO** Auto-generated method stub

Scanner sc=**new** Scanner(System.***in***);

**int** n=sc.nextInt();

**int** row=1;

**int** numspace=n;

**int** numstar1=1;

**int** numstar2=1;

**int** count=n;

**while**(row<=n)

{

**int** cspace=1;

**while**(cspace<numspace)

{

System.***out***.print(" ");

cspace++;

}

**int** value=count;

**int** cstar1=1;

**while**(cstar1<=numstar1)

{

**if**(value==n)

value=0;

System.***out***.print(value);

value++;

cstar1++;

}

**int** cstar2=1;

**int** value2=n-1;

**while**((cstar2<numstar2))

{

System.***out***.print(value2);

value2--;

cstar2++;

}

row++;

System.***out***.println();

numspace--;

numstar1++;

numstar2++;

count--;

}

}

}