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\* This is a program to print a diamond pattern of edge length 'n' and having an inner hollow diamond in it.

\* eg. edge length = 4

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import java.io.\*;

public class diamond

{

public static void main()throws IOException

{

InputStreamReader read=new InputStreamReader(System.in);

BufferedReader in=new BufferedReader(read);

int n,s,r,x,i,j,f,q,l;

System.out.println(" This is a program to print a diamond pattern of edge length 'n and having an inner hollow diamond in it.");

System.out.println(" Example : edge length=4");

System.out.println(" 1 ");

System.out.println(" 111 ");

System.out.println(" 11 11 ");

System.out.println("11 11");

System.out.println(" 11 11 ");

System.out.println(" 111 ");

System.out.println(" 1 ");

System.out.print("Enter the edge length: ");

n=Integer.parseInt(in.readLine());

f=n-1;

s=n-1;

r=n/2;

x=n%2;

if(x==1)

l=r+1;

else

l=r;

if(f%2==0)

q=(f/2)-1;

else

q=f/2;

for(i=1;i<=l;i++)

{

for(j=1;j<=s;j++)

{

System.out.print(" ");

}

s--;

for(j=1;j<= 2\*i-1;j++)

{

System.out.print("1");

}

System.out.println("");

}

for(i=l+1;i<=n;i++)

{

for(j=1;j<=s;j++)

{

System.out.print(" ");

}

s--;

for(j=1;j<=l;j++)

{

System.out.print("1");

}

for(j=1;j<=(2\*i-1)-n;j++)

{

System.out.print(" ");

}

for(j=1;j<=l;j++)

{

System.out.print("1");

}

System.out.println("");

}

s=1;

for(i=1;i<=q;i++)

{

for(j=1;j<=s;j++)

{

System.out.print(" ");

}

s++;

for(j=1;j<=l;j++)

{

System.out.print("1");

}

for(j=1;j<=(2\*f)-1-n;j++)

{

System.out.print(" ");

}

for(j=1;j<=l;j++)

{

System.out.print("1");

}

f=f-1;

System.out.println("");

}

for(i=f;i>=1;i--)

{

for(j=1;j<=s;j++)

{

System.out.print(" ");

}

s++;

for(j=1;j<=2\*i-1;j++)

{

System.out.print("1");

}

System.out.println("");

}

}

}