**Butterfly program:**

class butterfly{  
 public static void main(String[]args){  
 int n=4;  
 for(int i=1;i<=n;i++){  
 System.*out*.println("\*".repeat(i) + " ".repeat(2\*(n-i)) + "\*".repeat(i));  
 }  
 for(int i=n;i>=1;i--){  
 System.*out*.println("\*".repeat(i) + " ".repeat(2\*(n-i)) + "\*".repeat(i));  
 }  
 }  
}

**output:**

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**Pattern1:**

class HWpattern{  
 public static void main(String[]args){  
 int n=8;  
 for(int i=1;i<=n;i++){  
 if(i<=3){  
 System.*out*.println(" ");  
 for(int j=1;j<=i;j++){  
 System.*out*.print("\* ");  
 }  
 System.*out*.println(" ");  
 }  
 else if (i==4) {  
 System.*out*.println("\* \* \* ");  
 }  
 else if (i==5) {  
 System.*out*.println(" \* \* \*");  
 }  
 else{  
 System.*out*.print(" ");  
 for(int j=1;j<=(n-i+1);j++){  
 System.*out*.println("\* ");  
 }  
 System.*out*.println(" ");  
 }  
 }  
 }  
}

**output:**

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