

## Pattern Programs in Java

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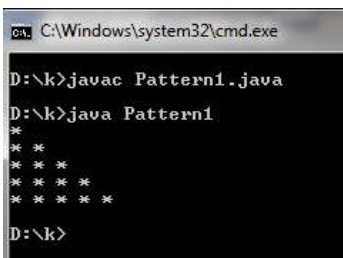
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### Display Patterns in java

#### Program 1:

```
class Pattern1{
public static void main(String args[]){
for(int i=1;i<=5;i++){
for(int j=1;j<=i;j++){
System.out.print("* ");
}
System.out.println();
}
}
}
```

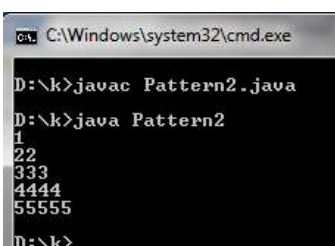
#### Output



#### Program 2:

```
class Pattern2{
public static void main(String args[]){
for(int i=1;i<=5;i++){
for(int j=1;j<=i;j++){
System.out.print(i);
}
System.out.println();
}
}
}
```

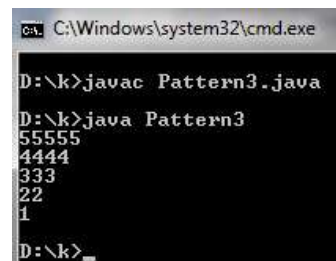
#### Output:



#### Program 3:

```
class Pattern3{
public static void main(String args[]){
for(int i=5;i>=1;i--){
for(int j=1;j<=i;j++){
System.out.print(i);
}
System.out.println();
}
}
}
```


#### Output:



#### Program 4:

```
class Pattern4{
public static void main(String args[]){
for(int i=5;i>=1;i--){
for(int j=1;j<=i;j++){
System.out.print("* ");
}
System.out.println();
}
}
}
```

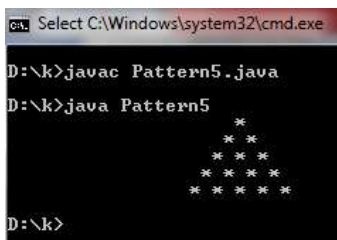
#### Output:



**Program 5:**

```
class Pattern5{
public static void main(String args[]){
int sp=20;
for(int i=1;i<=5;i++){
for(int k=1;k<=sp;k++){
System.out.print(" ");
}
sp--;
for(int j=1;j<=i;j++){
System.out.print("* ");
}
System.out.println();
}
}
}
```

**Output:**



**Program 6:**

```
class Pattern6{
public static void main(String args[]){
int sp=20;
for(int i=5;i>=1;i--){
for(int k=5;k<=sp;k++){
System.out.print(" ");
}
sp++;
for(int j=1;j<=i;j++){
System.out.print("* ");
}
System.out.println();
}
}
}
```

**Output:**



**Program 7:**

```
class Pattern7{
public static void main(String args[]){
int sp=20;
int i,j,k;
for( i=1;i<=5;i++){
for( k=1;k<=sp;k++){
System.out.print(" ");
}
sp--;
for( j=1;j<=i;j++){
System.out.print("* ");
}
System.out.println();
}
sp=20;
for(i=4;i>=1;i--){
for(k=4;k<=sp;k++){
System.out.print(" ");
}
sp++;
for(j=1;j<=i;j++){
System.out.print("* ");
}
System.out.println();
}
}
}
```

**Output:**



**Program 8:**

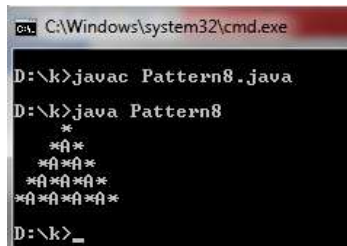
```
class Pattern8{
public static void main(String args[]){
int n, c, k, space, count = 1;
space =n=5;
for (c = 1; c <= n; c++){
for (k = 1; k < space; k++){
System.out.print(" ");
}
for (k = 1; k <= c; k++){
System.out.print("*");
}
if (c > 1 && count < c){
System.out.print("A");
}
count++;
}
```

```

}
}
System.out.print("\n");
space--;
count = 1;
}
}
}
}
}
}

```

**Output:**



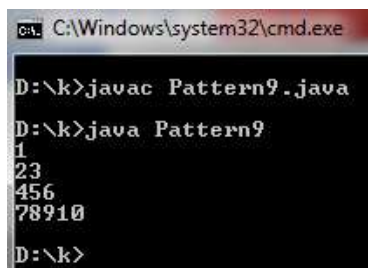
**Program 9:**

```

class Pattern9{
public static void main(String args[]){
int rows, i, j, number= 1;
rows=4;
for(i=1; i <= rows; i++){
for(j=1; j <= i; ++j){
System.out.print(number);
++number;
}
System.out.print("\n");
}
}
}

```

**Output:**



**Program 10:**

```

class Pattern10{
public static void main(String args[]){
int rows, c = 1, space, i, j;rows=5;
for(i=0; i<rows; i++){
for(space=1; space <= rows-i; space++)
System.out.print(" ")
if (j==0 || i==0)
c = 1;

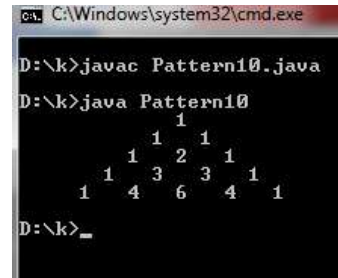
```

```

else
c = c*(i-j+1)/j;
System.out.print(" "+c);
System.out.print("\n");
}
}
}
}
}
}

```

**Output:**



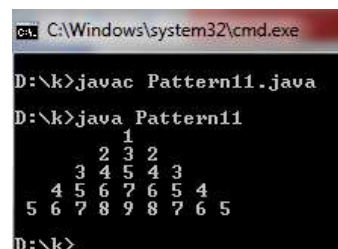
**Program 11:**

```

class Pattern11{
public static void main(String args[]){
int i, space, rows, k=0, count = 0, count1 = 0;
rows=5;
for(i=1; i<=rows; ++i) {
for(space=1; space <= rows-i; ++space) {
System.out.print(" ")
++count;
}
while(k != 2*i-1) {
if (count <= rows-1) {
System.out.print(" "+(i+k));
++count;
}
else{
++count1;
System.out.print(" "+(i+k-2*count1));
}
++k;
}
count1 = count = k = 0;
System.out.print("\n");
}
}
}
}
}
}
}

```

**Output:**



**Program 12:**

```
class Pattern12{
public static void main(String args[]){
for(int i=1;i<=5;i++){
for(int j=1;j<=5;j++){
System.out.print(" * ");
}
System.out.println();
}
}
}
```

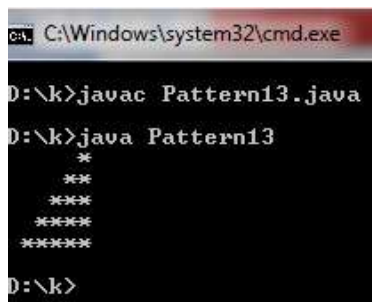
**Output:**



**Program 13:**

```
class Pattern13{
public static void main(String args[]){
for (int i=1; i<=5; i++) {
for (int j=5; j>=i; j--) {
System.out.print(" ");
}
for (int k=1; k<=i; k++) {
System.out.print(" *");
}
System.out.print("\n");
}
}
}
```

**Output:**

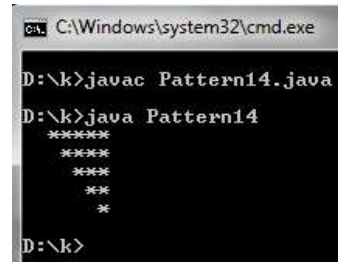


**Program 14:**

```
class Pattern14{
public static void main(String args[]) {
int i,j,k,sp=1;
for (i=5; i>=1; i--) {
for (k=sp; k>=0; k--) {
System.out.print(" "); // only 1 space
}
for (j=i; j>=1; j--) {
```

```
System.out.print("*");
}
sp = sp + 1;
System.out.print("\n");
}
}
}
```

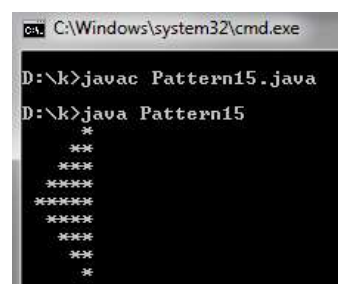
**Output:**



**Program 15:**

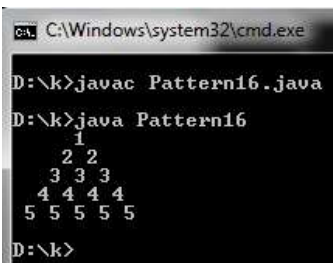
```
class Pattern15{
public static void main(String args[]) {
int i,j,k,sp=1;
for (i=1; i<=5; i++) {
for (k=sp; k<=5; k++) {
System.out.print(" ");
}
for (j=0; j< i; j++) {
System.out.print("*");
}
sp = sp + 1;
System.out.print("\n");
}
sp = 1;
for (i=4; i>=1; i--) {
for (k=sp; k>=0; k--) {
System.out.print(" ");
}
for (j=i; j>=1; j--) {
System.out.print("*");
}
sp = sp + 1;
System.out.print("\n");
}
}
}
```

**Output:**



**Program 16:**

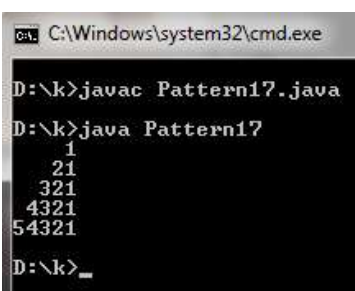
```
class Pattern16{
public static void main(String args[] ) {
int i, j=5, k, x;
for (i=1;i<=5;i++) {
for (k=1;k<=j;k++) {
System.out.print(" ");
}
for (x=1;x<=i;x++) {
System.out.print(i);
System.out.print(" ");
}
System.out.print("\n");
j=j-1;
}
}
```

**Output:**

```
C:\Windows\system32\cmd.exe
D:\>javac Pattern16.java
D:\>java Pattern16
1
2 2
3 3 3
4 4 4 4
5 5 5 5 5
D:\>
```

**Program 17:**

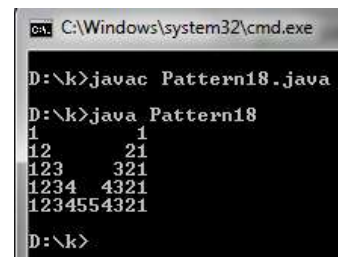
```
class Pattern17{
public static void main(String args[] ) {
int i,j,k;
for (i=1;i<=5;i++) {
for (j=5;j>=1;j--) {
if(j<=i)
System.out.print(j);
else
System.out.print(" ");
}
System.out.print("\n");
}
}
}
```

**Output:**

```
C:\Windows\system32\cmd.exe
D:\>javac Pattern17.java
D:\>java Pattern17
1
21
321
4321
54321
D:\>_
```

**Program 18:**

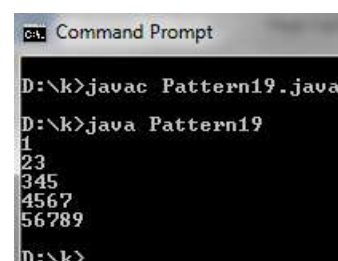
```
class Pattern18{
public static void main(String args[] ) {
int i,j,k;
for (i=1;i<=5;i++) {
for (j=1;j<=5;j++) {
if(j<=i)
System.out.print(j);
else
System.out.print(" ");
}
for (j=5;j>=1;j--) {
if(j<=i)
System.out.print(j);
else
System.out.print(" ");
}
System.out.print("\n");
}
}
```

**Output:**

```
C:\Windows\system32\cmd.exe
D:\>javac Pattern18.java
D:\>java Pattern18
1
12 21
123 321
1234 4321
1234554321
D:\>
```

**Program 19:**

```
class Pattern19{
public static void main(String args[] ) {
int i,j,k;
for (i=1;i<=5;i++) {
j=i;
for (k=1;k<=i;k++) {
System.out.print(j++);
}
System.out.print("\n");
}
}
```

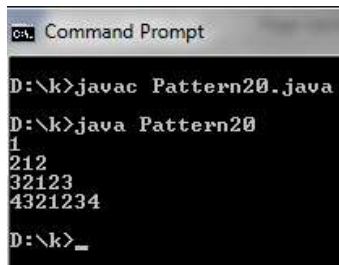
**Output:**

```
Command Prompt
D:\>javac Pattern19.java
D:\>java Pattern19
1
23
345
4567
56789
D:\>
```

**Program 20:**

```
class Pattern20{
public static void main(String args[]) {
int i,j;
for (i=1;i<=4;i++) {
for (j=i;j>1;j--)
System.out.print(j);
for (j=1;j<=i;j++)
System.out.print(j);
System.out.print("\n");
}
}
}
```

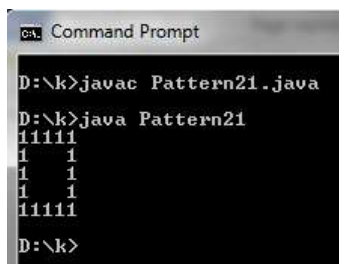
**Output:**



**Program 21:**

```
class Pattern21{
public static void main(String args[]) {
int i,j;
for (i=1;i<=5;i++) {
for (j=1;j<=5;j++) {
if(j==5 || j==1 || i==1 || i==5)
System.out.print("1");
else
System.out.print(" ");
}
System.out.print("\n");
}
}
}
```

**Output:**

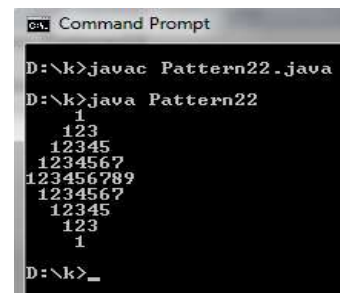


**Program 22:**

```
class Pattern22{
public static void main(String args[]) {
int i, j, k;
for (i=1;i<=5;i++) {
```

```
for (j=i;j<5;j++) {
System.out.print(" ");
}
for (k=1;k<(i*2);k++) {
System.out.print(k);
}
System.out.print("\n");
}
for (i=4;i>=1;i--) {
for (j=5;j>i;j--) {
System.out.print(" ");
}
for (k=1;k<(i*2);k++) {
System.out.print(k);
}
System.out.print("\n");
}
}
}
```

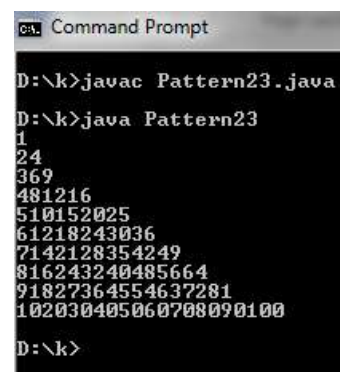
**Output:**



**Program 23:**

```
class Pattern23{
public static void main(String args[]) {
int i,j;
for (i=1;i<=10;i++) {
for (j=1;j<=i;j++) {
System.out.print(i*j);
}
System.out.print("\n");
}
}
}
```

**Output:**



**Program 24:**

```
class Pattern24{
public static void main(String args[]) {
int i,j,r,k=1;
r=10;
System.out.print("FLOYD'S TRIANGLE\n\n");
for(i=1;i<=r;i++){
for(j=1;j<=i;j++,k++){
System.out.print(k);
System.out.print("\n");
}
}
}
```

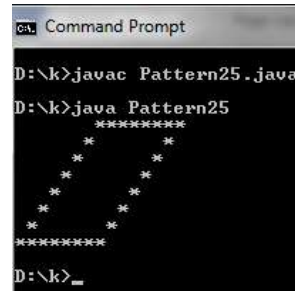
**Output:**



**Program 25:**

```
class Pattern25{
public static void main(String args[]) {
int i, j, rows;
/* Input number of rows from user */
rows=8;
for(i=1; i<=rows; i++) {
/* Print trailing spaces */
for(j=1; j<=rows-i; j++) {
System.out.print(" ");
}
/* Print stars and center spaces */
for(j=1; j<=rows; j++) {
if(i==1 || i==rows || j==1 || j==rows)
System.out.print("*");
else
System.out.print(" ");
}
System.out.print("\n");
}
}
}
```

**Output:**



**REFERENCES**

1. <http://scanfree.com/programs/c/programs-to-print-pyramid-patterns-in-c-part-1/>