PATTERN PROBLEMS

1. FOR OUTER LOOP , COUNT THE NO.OF LINE/ROWS
2. FOR INNER LOOP , FOCUS ON COLUMNS & CONNECT THEM SOMEHOW TO ROWS
3. WHATEVER U PRINTITNG PRINT THEM INSIDE THE INNER FOR LOOP
4. OBSERVE SYEMMETRY ( OPTIONAL)

PATTERN 1 – rectangular pattern

for(int i=0;i<4;i++){  
for(int j=0;j<4;j++){

sysout(“\*”); } }

PATTERN 2 – RIGHT ANGLED TRAINGLE

for(int i=0;i<=4;i++){  
for(int j=0;j<i;j++){

sysout(“\*”);}

}

PATTERN 3 – RIGHT ANGLED TRAINGLE (NUMBERS SAME LINE TO LINE)

for(int i=0;i<=4;i++){  
for(int j=0;j<i;j++){

sysout(i); }

sysout();}

PATTERN 4 - RIGHT ANGLED TRAINGLE (NUMBERS SAME LINE TO LINE)

for(int i=0;i<=4;i++){

for(int j=0;j<4;j++){  
 sysout(j); } }

PATTERN 5 – REVERSED RIGHT ANGLED TRAINGLE (NUMBERS)

for(int i=1;i<=n;i++){

for(int j=1;j<=n-i+1;j++){

sysout(j); } }

PATTERN 6 - REVERSE START PATTERN ( SPACE – STAR – SPACE)

for(int i=0;i<=n;i++){  
 //space

for(int j=0;j<i;j++){

sysout(“ “); }

//stars

for(int j=0;j<2\*n-(2\*i+1);j++){

sysout(“\*”); }

//space

For(int j=0;j<I;j++){

Sysout(“ ” ); } sysout();}

PATTERN 7 -

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package pattern;

public class pattern7 {

static void print1(int n) {

// Upper half

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

// leading spaces

for (int j = 0; j < n - i - 1; j++) {

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

}

// stars

for (int j = 0; j < 2 \* i + 1; j++) {

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

}

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

}

}

static void print2(int n) {

// Lower half

for (int i = n - 1; i >= 0; i--) {

// leading spaces

for (int j = 0; j < n - i - 1; j++) {

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

}

// stars

for (int j = 0; j < 2 \* i + 1; j++) {

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

}

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

}

}

public static void main(String[] args) {

int n = 5;

*print1*(n);

*print2*(n);

}

}

PATTERN 8 - \*

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for(int i=0;i<2\*n-1;i++){

int stars=i;

if(i>n) stars=2\*n-i;

for(int j=1;j<=stars;j++){

sysout(“\*”);}syout();}

PATTERN 9 -

1

0 1

1 0 1

0 1 0 1

1 0 1 0 1

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

int start=1;

if(i%2==0) start=1;

else star=0;

for(int j=1;j<=i;j++){

sysout(start);

start=1-start; } sysout() ; }

PATTERN 10 -

1 1

12 21

123 321

12344321

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

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

//numbers

For(int j=1;j<=I;j++){

Sysout(j);}

//space

For(int j=1;j<=space;j++){

Sysout(“ “); }

//numbers

For(int j=i;j>=1;j++){

Sysout(j); } sysout(); space=space-2; }

PATTERN 11 –

1

2 3

4 5 6

7 8 9 10

11 12 13 14 15

Int num=1;

for(int i=1;I,=n;i++){

for(int j=1;j<=i;j++)

{

Sysout (num);

Num=num+1;

}sysout();}

PATTERN 12 –

A

A B

A B C

A B C D

A B C D E

For(int i=0;i<=n;i++){  
for(char ch=’A’;ch<=’A’+I;ch++){  
sysout(ch);}sysout();}

PATTERN 13 –

A B C D E

A B C D

A B C

A B

A

For(int i=0;i<=n;i++){  
for(char ch=’A’;ch<=’A’+n-i-1;ch++){  
sysout(ch);}sysout();}

PATTERN 14 –

A

B B

C C C

D D D D

E E E E E

For(int i=0;i<n;i++){

Char ch=(char)(‘A’+1);  
for(int j=0;j<=I;j++){

Sysout(ch);}sysout();}

PATTERN 16 -

A

ABA

ABCBA

ABCDCBA

ABCDEDCBA

For(int i=0;i<n;i++){  
//space , alphabets , space

For(int j=0;j<n-i-1;j++){

Sysout(“ “); }

//alphabets

Char ch=’A’;

Int breakpoint=(2\*i+1)/2;

For(int j=1;j<2\*i+1;j++){

Sysout(ch);

If(j<=breakpoint) ch++;

Else ch--;

}

//space

For(int j=0;j<n-i-1;j++){

Sysout(“ “);

}sysout(); }

PATTERN 17 –

E

DE

CDE

BCDE

ABCDE

Class {

Static void print(int n){  
for(int i=0;i<n;i++){  
for(char ch=(char)(‘E’-i);ch<=’E’;ch++){

Sysout(ch);

} sysout(); } }

Main(){

Int n=5;

Print(n); } }

PATTERN 18 –

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Class pattern{

Static void print(int n){

Int initialspace=0;  
for(int i=0;i<n;i++){

//stars , space ,stars

For(int j=1;j<n-I;j++){  
sysout(“ “);

For(int j=0;j< initialspace;j++){

Sysout(“\*”);

}

For(int j=1;j<n-I;j++){

Sysout(“ “);

}

Initialspace+=2;

Sysout();

}  
}  
main(){  
int n=5;

Print(n);

}

}