**Tổng hợp code C về Hình**

**Example 1**

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#include <stdio.h>

int main() {

int i, j, rows;

printf("Enter the number of rows: ");

scanf("%d", &rows);

for (i = 1; i <= rows; ++i) {

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

printf("\* ");

}

printf("\n");

}

return 0;

}

**Example 2**

1

1 2

1 2 3

1 2 3 4

1 2 3 4 5

#include <stdio.h>

int main() {

int i, j, rows;

printf("Enter the number of rows: ");

scanf("%d", &rows);

for (i = 1; i <= rows; ++i) {

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

printf("%d ", j);

}

printf("\n");

}

return 0;

}

**Example 3**

A

B B

C C C

D D D D

E E E E E

#include <stdio.h>

int main() {

int i, j;

char input, alphabet = 'A';

printf("Enter an uppercase character you want to print in the last row: ");

scanf("%c", &input);

for (i = 1; i <= (input - 'A' + 1); ++i) {

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

printf("%c ", alphabet);

}

++alphabet;

printf("\n");

}

return 0;

}

**Example 4**

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#include <stdio.h>

int main() {

int i, j, rows;

printf("Enter the number of rows: ");

scanf("%d", &rows);

for (i = rows; i >= 1; --i) {

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

printf("\* ");

}

printf("\n");

}

return 0;

}

**Example 5**

1 2 3 4 5

1 2 3 4

1 2 3

1 2

1

#include <stdio.h>

int main() {

int i, j, rows;

printf("Enter the number of rows: ");

scanf("%d", &rows);

for (i = rows; i >= 1; --i) {

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

printf("%d ", j);

}

printf("\n");

}

return 0;

}

**Example 6**

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#include <stdio.h>

int main() {

int i, space, rows, k = 0;

printf("Enter the number of rows: ");

scanf("%d", &rows);

for (i = 1; i <= rows; ++i, k = 0) {

for (space = 1; space <= rows - i; ++space) {

printf(" ");

}

while (k != 2 \* i - 1) {

printf("\* ");

++k;

}

printf("\n");

}

return 0;

}

**Example 6**

1

1

2 3 2

3 4 5 4 3

4 5 6 7 6 5 4

5 6 7 8 9 8 7 6 5

#include <stdio.h>

int main() {

int i, space, rows, k = 0, count = 0, count1 = 0;

printf("Enter the number of rows: ");

scanf("%d", &rows);

for (i = 1; i <= rows; ++i) {

for (space = 1; space <= rows - i; ++space) {

printf(" ");

++count;

}

while (k != 2 \* i - 1) {

if (count <= rows - 1) {

printf("%d ", i + k);

++count;

} else {

++count1;

printf("%d ", (i + k - 2 \* count1));

}

++k;

}

count1 = count = k = 0;

printf("\n");

}

return 0;

}

**Example 7**

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#include <stdio.h>

int main() {

int rows, i, j, space;

printf("Enter the number of rows: ");

scanf("%d", &rows);

for (i = rows; i >= 1; --i) {

for (space = 0; space < rows - i; ++space)

printf(" ");

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

printf("\* ");

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

printf("\* ");

printf("\n");

}

return 0;

}

**Example 8**

1

1 1

1 2 1

1 3 3 1

1 4 6 4 1

1 5 10 10 5 1

//Pascal's Triangle

#include <stdio.h>

int main() {

int rows, coef = 1, space, i, j;

printf("Enter the number of rows: ");

scanf("%d", &rows);

for (i = 0; i < rows; i++) {

for (space = 1; space <= rows - i; space++)

printf(" ");

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

if (j == 0 || i == 0)

coef = 1;

else

coef = coef \* (i - j + 1) / j;

printf("%4d", coef);

}

printf("\n");

}

return 0;

}

**Example 9**

1

2 3

4 5 6

7 8 9 10

#include <stdio.h>

int main() {

int rows, i, j, number = 1;

printf("Enter the number of rows: ");

scanf("%d", &rows);

for (i = 1; i <= rows; i++) {

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

printf("%d ", number);

++number;

}

printf("\n");

}

return 0;

}

**Example 10**

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#include <stdio.h>

int main()

{

int i, j, n;

scanf("%d", &n);

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

{

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

{

if (i == 1 || i == j || j == 1 || j == n || i == n || i + j == n + 1)

printf("# ");

else

printf(" ");

}

printf("\n");

}

}

**Example 11**

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#include <stdio.h>

int main()

{

int i, j, n;

scanf("%d", &n);

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

{

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

{

printf(" ");

}

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

{

if (i == 1 || j == 1 || i == n || j == n)

{

printf("\*");

}

else

printf(" ");

}

printf("\n");

}

}

**Example 11**

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#include <stdio.h>

int main()

{

int i, j, space, rows = 8, star = 0;

/\* Printing upper triangle \*/

for (i = 0; i < rows; i++)

{

if (i < 5)

{

/\* Printing upper triangle \*/

for (space = 1; space < 5 - i; space++)

{

printf(" ");

}

/\* Printing stars \*/

while (star != (2 \* i + 1))

{

printf("\*");

star++;

;

}

star = 0;

/\* move to next row \*/

printf("\n");

}

else

{

/\* Printing bottom walls of huts \*/

for (j = 0; j < 9; j++)

{

if ((int)(j / 3) == 1)

printf(" ");

else

printf("\*");

}

printf("\n");

}

}

return 0;

}

**Example 12**

input n: 5

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#include <stdio.h>

int main()

{

int n;

printf("input n: ");

scanf("%d", &n);

//thoi2

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

{

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

{

printf(" ");

}

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

{

printf(" \* ");

}

printf("\n");

}

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

{

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

{

printf(" ");

}

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

{

printf(" \* ");

}

printf("\n");

}

}

**Example 13**

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#include <stdio.h>

int main()

{

int n;

scanf("%d", &n);

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

{

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

{

if (j <= n - i + 1 || j >= n + i)

{

printf(" \* ");

}

else

{

printf(" ");

}

}

printf("\n");

}

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

{

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

{

if (j <= n - i + 1 || j >= n + i)

{

printf(" \* ");

}

else

{

printf(" ");

}

}

printf("\n");

}

}

**Example 14**

Enter the number of columns5

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#include <stdio.h>

int main(void)

{

int n;

printf("Enter the number of columns");

scanf("%d", &n);

// printing the upper part of the pattern..

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

{

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

{

printf(" ");

}

for (int k = 0; k <= n - i; k++)

{

printf(" \* ");

}

printf("\n");

}

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

{

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

{

printf(" ");

}

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

{

printf(" \* ");

}

printf("\n");

}

return 0;

}

**Example 15**

Enter the odd number only 5

+

+

+ + + + +

+

+

#include <stdio.h>

int main(void)

{

int n;

printf("Enter the odd number only");

scanf("%d", &n);

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

{

if (i == ((n / 2) + 1))

{

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

{

printf(" + ");

}

}

else

{

for (int j = 1; j <= n / 2; j++)

{

printf(" ");

}

printf(" + ");

}

printf("\n");

}

return 0;

}

**Example 16**

1

1 2 1

1 2 3 2 1

1 2 3 4 3 2 1

1 2 3 4 5 4 3 2 1

#include <stdio.h>

#include <math.h>

void tamGiacThuong(int h)

{

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

{

for (int j = 1; j < 2 \* h; j++)

{

if (abs(h - j) <= (i - 1))

{

printf("%3d", i - abs(h - j));

}

else

{

printf(" ");

}

}

printf("\n");

}

}

int main()

{

int h;

scanf("%d", &h);

tamGiacThuong(h);

return 0;

}

**Example 17**

Enter the number of rows5

1 2 3 4 5 4 3 2 1

1 2 3 4 3 2 1

1 2 3 2 1

1 2 1

1

#include <stdio.h>

#include <stdlib.h>

int main() {

int i,j,rows,space=0;

printf("Enter the number of rows");

scanf("%d",&rows);//taking numer of rows from user

for(i=rows; i>=1; i--){

//outer for loop

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

printf(" ");

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

printf("%d ",j);

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

printf("%d ",j);

printf("\n");

space++;

}

getch();

return 0;

}

**Example 18**

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#include <stdio.h>

int main()

{

int i, j, n;

scanf("%d", &n);

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

{

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

{

if (j == 1 || i == n || i == j)

printf("\*");

else

printf(" ");

}

printf("\n");

}

}

**Example 19**

Enter the number of rows: 5

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#include <stdio.h>

int main()

{

int i, j, rows;

printf("Enter the number of rows: ");

scanf("%d", &rows);

/\* printing top semi circular shapes of heart \*/

for (i = rows / 2; i <= rows; i += 2)

{

/\* Printing Spaces \*/

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

{

printf(" ");

}

/\* printing stars for left semi circle \*/

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

{

printf(" \* ");

}

/\* Printing Spaces \*/

for (j = 1; j <= rows - i; j++)

{

printf(" ");

}

/\* printing stars for right semi circle \*/

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

{

printf(" \* ");

}

/\* move to next row \*/

printf("\n");

}

/\* printing inverted start pyramid \*/

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

{

for (j = i; j < rows; j++)

{

printf(" ");

}

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

{

printf(" \* ");

}

/\* move to next row \*/

printf("\n");

}

return 0;

}

**Example 20**

[](https://user-images.githubusercontent.com/29374426/179383124-93eacd81-b028-4b21-ab8f-537a84fe5fbd.png)

#include <stdio.h>

int main()

{

int i, j, n;

scanf("%d", &n);

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

{

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

{

if (i == 1 || i == n || i == j)

{

printf("\* ");

}

else

printf(" ");

}

printf("\n");

}

}

**Example 21**

[](https://user-images.githubusercontent.com/29374426/179383109-6e2bc6e9-bc32-493f-8d3a-d47523e40f6e.png)

#include <stdio.h>

int main()

{

int i, j, n;

scanf("%d", &n);

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

{

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

{

if (i == 1 || i == n || i == j || i + j == n + 1)

{

printf("\* ");

}

else

printf(" ");

}

printf("\n");

}

}