

Tổng hợp code C về Hình

Example 1

```
*
* *
* * *
* * * *
* * * * *
#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

```

* * * * *
* * * *
* * *
* *
*
#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

```

        *
      * * *
    * * * * *
  * * * * * * *
* * * * * * * * *
#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

```

* * * * *
* * * * *
* * * * *
* * *
*
#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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*   *   *   *
*    * * *   *
*     * * * *
*      * * *
*       * * *
*        * *
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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

```

*****
*      *
*      *
*      *
*      *
*****
#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

```

*
***
****
*****
*****
*****

```

```

***   ***
***   ***
***   ***
#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
      *
    * * *
  * * * * *
* * * * * * *
* * * * * * * *

```

```

* * * * *
 * * * *
  * * *
   *
#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

```

* * * * *
* * * *
* * *
* *
*
* *
* * *
* * *
* * *
* * *

```



```

#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

```

*****
****
***
**
*
**
***
****
*****

```

```

#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

```

*
**
* *
*  *
*   *
*    *
*****
#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

```

    * *           * *
  * * * *       * * * *
* * * * * * * * * *
  * * * * * * *
    * * * * *
      * * * *
        * *
          *

```

```

#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

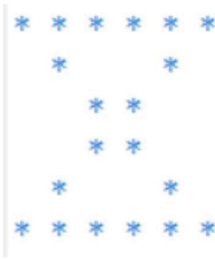


```

#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



```
#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");
    }
}
```