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

        {

            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

A black square with white and blue stars

Description automatically generated

#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

A screenshot of a phone

Description automatically generated

#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("  ");