

Assignment 8

①

```
#include <stdio.h>
int main()
{
    int i, j;
    for (i = 1; i <= 5; i++)
    {
        for (j = 1; j <= i; j++)
        {
            printf("*");
        }
        printf("\n");
    }
    return 0;
}
```



```
*
**
***
****
*****
```

②

```
#include <stdio.h>
int main()
{
    int i, j;
    for (i = 1; i <= 5; i++)
    {
        for (j = 1; j <= 5; j++)
        {
            if (j <= 6 - i)
                printf("*");
            else
                printf(" ");
        }
        printf("\n");
    }
    return 0;
}
```



```

*
**
***
****
*****
```

```

③ #include <stdio.h>
int main()
{
    int i, j;
    for (i=5; i>=1; i--)
    {
        for (j=1; j<=i; j++)
        {
            printf("x");
        }
        printf("\n");
    }
    return 0;
}

```

```

*****
****
***
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```

```

④ #include <stdio.h>
int main()
{
    int i, j;
    for (i=5; i>=1; i--)
    for (i=1; i<=5; i++)
    {
        for (j=1; j<=5; j++)
        {
            if (j<=i)
                printf("*");
            else
                printf(" ");
        }
        printf("\n");
    }
    return 0;
}

```

```

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

```

```

5 #include <stdio.h>
  int main()
  {
    int i, j;
    for (i=1; i<=5; i++)
    {
      for (j=1; j<=9; j++)
      {
        if (j >= 6-i && j <= 4+i)
          printf("x");
        else
          printf(" ");
      }
      printf("\n");
    }
    return 0;
  }

```

```

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

```

```

6 #include <stdio.h>
  int main()
  {
    int i, j;
    for (i=1; i<=5; i++)
    {
      for (j=1; j<=9; j++)
      {
        if (j >= i && j <= 10-i)
          printf("x");
        else
          printf(" ");
      }
      printf("\n");
    }
  }

```

```

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

```

⑦ #include <stdio.h>

int main()

```
{ int i, j;
  for (i = 1; i <= 5; i++)
  {
    for (j = 1; j <= 10; j++)
    {
      if (j <= 6 - i || j >= 5 + i)
        printf("*");
      else
        printf(" ");
    }
    printf("\n");
  }
}
```

```
* * * * * * * * * *
* * * *      * * * *
* * *          * * *
* *            * *
*              *
*
```

⑧

#include <stdio.h>

int main()

```
{ int i, j, a;
  for (i = 1; i <= 4; i++)
  {
    a = 1;
    for (j = 1; j <= 7; j++)
    {
      if (j >= 5 - i && j <= 3 + i)
      {
        printf("%d", a);
        j = 4 ? a++ : a--;
      }
      else
        printf(" ");
    }
    printf("\n");
  }
  return 0;
}
```

```
      1
    1 2 1
  1 2 3 2 1
1 2 3 4 3 2 1
```

9

```
#include <stdio.h>
```

```
int main()
```

```
{ int i, j;
```

```
char k;
```

```
for (i=1; i<=4; i++)
```

```
{ k = '1';
```

```
for (j=1; j<=7; j++)
```

```
{ if (j>=i && j<=8-i)
```

```
{ printf ("%c", k);
```

```
if (j<4) k++; k--;
```

```
else
```

```
printf (" ");
```

```
} printf ("\n");
```

```
} return 0;
```

1 2 3 4 3 2 1

1 2 3 2 1

1 2 1

1

12) #include <stdio.h>

int main()

{

int i, j;

char k;

for (i=1; i<=4; i++)

{

k='A';

for (j=1; j<=7; j++)

{

if (j==i || j<=8-i)

{

printf("%c", k);

j<4? k++: k--;

}

else

printf(" ");

}

printf("\n");

}

return 0;

}

```
A B C D C B A
A B C B A
A B A
A
```

14) #include <stdio.h>

int main()

{

int i, j;

char k;

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

{

k='A';

for (j=1; j<=8; j++)

{ if (j>=6-i || j<=4+i)

{ printf("%c", k);

j<5? k++: k--;

}

else

printf(" ");

}

printf("\n");

}

return 0;

}

```
A
A B A
A B C B A
A B C D C B A
A B C D E D C B A
```

(13)

```

#include <stdio.h>
int main ()
{
    int i, j;
    char k;
    for (i = 1; i <= 7; i++)
    {
        k = 'A';
        for (j = 1; j <= 13; j++)
        {
            if (j <= 8 - i || j >= 6 + i)
            {
                printf("%c", k);
                j < 7 ? k++ : k--;
            }
            else
                printf(" ");
            if (j == 7)
                k--;
        }
        printf("\n");
    }
    return 0;
}

```

```

A B C D E F G F E D C B A
A B C D E F   F E D C B A
A B C D E     E D C B A
A B C D       D C B A
A B C         C B A
A B           B A
A

```



```

(14) #include <stdio.h>
int main()
{
    int i, j;
    for (i=0; i<5; i++)
    {
        for (j=0; j<5; j++)
        {
            if (j==0 || i==j || i==4)
                printf("*");
            else
                printf(" ");
        }
        printf("\n");
    }
    return 0;
}

```

```

*
* *
*  *
*   *
*  * * *

```

```

(15) #include <stdio.h>
int main()
{
    int i, j;
    for (i=1; i<=5; i++)
    {
        for (j=i; j<=5; j++)
        {
            printf(" ");
        }
        for (j=1; j<=i; j++)
        {
            if (i==5 || j==1 || j==i)
                printf("*");
            else
                printf(" ");
        }
        printf("\n");
    }
    return 0;
}

```

```

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

```


16

```
#include <stdio.h>
```

```
int main()
```

```
{
```

```
    int i, j;
```

```
    for (i=1; i<=5; i++)
```

```
    {
```

```
        for (j=1; j<=5; j++)
```

```
        { printf(" ");
```

```
        }
```

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

```
        {
```

```
            if (i==5 || j==1 || j==(2*i-1))
```

```
                printf("*");
```

```
            else
```

```
                printf(" ");
```

```
        }
```

```
    }
```

```
    printf("\n");
```

```
}
```

```
return 0;
```

```
}
```



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```
#include <stdio.h>
```

```
int main()
```

```
{
```

```
    int i, j;
```

```
    for (i=5; i>=1; i--)
```

```
    {
```

```
        for (j=1; j<=5; j++)
```

```
        { printf(" ");
```

```
        }
```

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

```
        {
```

```
            if (i==5 || j==1 || j==(2*i-1))
```

```
                printf("*");
```

```
            else
```

```
                printf(" ");
```

```
        }
```

```
    }
```

```
    printf("\n");
```

```
}
```



⑩ #include <stdio.h>

int main()

{ int i, j;

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

{ for (j=i; j<=5; j++)

{ printf(" ");

}

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

{ printf("*");

}

printf("\n");

}

for (i=5; i>=1; i--)

{

for (j=i; j<=5; j++)

{

printf(" ");

}

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

{

printf("*");

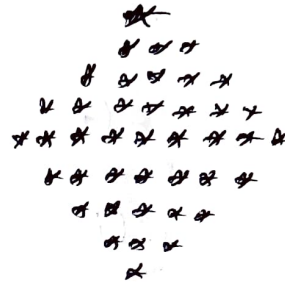
}

printf("\n");

}

return 0;

}



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```
#include <stdio.h>
int main()
```

```
{
    int i, j;
```

```
    for (i=0; i<3; i++)
```

```
    {
        for (j=0; j<19; j++)
```

```
        {
            if ((12-i <= j) && (j <= 6+i)) || ((12-i <= j)
                && (16+i >= j)))
```

```
                printf("*");
```

```
            else
```

```
                printf(" ");
```

```
        }
```

```
        printf("\n");
```

```
    }
```

```
    for (i=0; i<10; i++)
```

```
    {
```

```
        for (j=0; j<19; j++)
```

```
        {
            if ((i==0) && (j==6))
```

```
                printf("my sir");
```

```
            if ((i==0) && (j==6) && (j<12))
```

```
                continue;
```

```
            if ((i<=j) && (j<=18-i))
```

```
                printf("*");
```

```
            else
```

```
                printf(" ");
```

```
        }
```

```
        printf("\n");
```

```
    }
    return 0;
```

```
}
```