

Assignment - 8

#include <stdio.h> included in all answers

```
(1) int main() {
    int i, j;
    for (i = 1; i <= 5; i++)
    {
        for (j = 1; j <= 5; j++)
        {
            if (j <= i)
                printf("*");
            else
                printf(" ");
        }
        printf("\n");
    }
    return 0;
}
```

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



```

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

```

```

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

```

```

5. 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("*");
            else
                printf(" ");
        }
        printf("\n");
    }
    return 0;
}

```

```

6. int main() {
    int i, j;
    for (i = 1; i <= 5; i++) {
        for (j = 1; j <= 9; j++) {
            if (i <= j && j <= 10 - i)
                printf("*");
            else printf(" ");
                printf(" ");
            printf("\n");
        }
        return 0;
    }
}

```

```

7. 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 int main() {
    int i, j, s, a = 2;
    for (i = 1; i <= 4; i++)
    {
        for s = 1;
        a = 2;
        for (j = 1; j <= 7; j++)
        {
            if (j >= s - i && j <= 3 + i)
            {
                if (j <= 4) {
                    printf("%d ", s);
                    s++;
                }
                else {
                    printf("%d ", s - a);
                    a++;
                }
            }
            else printf(" ");
        }
        printf("\n");
    }
    return 0;
}

```

```

9 int main() {
    int i, j, s, a = 2;
    for (i = 1; i <= 4; i++) {
        s = 1;
        a = 2;
        for (j = 1; j <= 7; j++) {
            if (j >= i && j <= 8 - i) {
                if (j <= 4) {
                    printf("%d ", s);
                    s++;
                }
            }
        }
    }
}

```

```

else {
    printf ("%d", s-a);
    a++;
}
else
    printf (" ");
    printf ("\n");
}

```

10 { int main()

```

    int i, j, a, s;
    for ( i=1; i<= 4; i++)
    {

```

```

        s = 1;

```

```

        a = 1;

```

```

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

```

```

            if (j<= s-i || j>= 3+i)

```

```

                if (j<= 4)

```

```

                {

```

```

                    printf ("%d", s);

```

```

                    if (j!= 4)

```

```

                        s++ s++;

```

```

                }

```

```

            else {

```

```

                printf ("%d", s-a);
                a++;
            }

```

```

        else

```

```

            printf (" ");

```

```

            printf ("\n");
        }
}

```



```

41 int main()
{
    int i, j, a, s;
    for ( i=1; i<=5; i++)
    {
        a=65;
        s=2;
        for ( j=1; j<=9; j++)
        {
            if (j>=6-i && j<=4+i)
            {
                printf ("%c", a);
                a++;
            }
            else
            {
                printf ("%c", a-s);
                s++;
            }
            else
                printf (" ");
        }
        printf ("\n");
    }
    return 0;
}

```

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```
int main()
```

```
{
```

```
int i, j, a, s;
```

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

```
    a = 65
```

```
    s = 2;
```

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

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

```
            if (j <= 4) {
```

```
                printf("%c", a);
```

```
                a++;
```

```
            } else {
```

```
                printf("%c", a - s);
```

```
                s++;
```

```
            } else printf(" ");
```

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

13.

```
int main () {
```

```
int i, j, a, s;
```

```
for (i = 1; i <= 7; i++) {
```

```
    a = 65;
```

```
    s = 1;
```

```
    for (j = 1; j <= 13; j++) {
```

```
        if (j <= 8 - i || j >= 6 + i)
```

```
            if (j <= 7) {
```

```
                printf("%c", a);
```

```
                if (j != 7)
```

```
                    a++;
```

```
            } else {
```

```
                printf("%c", a - s);
```

```
                s++;
```

```
            } else printf(" ");
```



```

    printf ( "\n" );
}
}

```

```

14 int main ( ) {
    int i, j;
    for ( i = 1; i <= 4; i++ ) {
        for ( j = 1; j <= 4; j++ )
        {
            if ( j <= 1 || j == i )
                printf ( " * " );
            else
                printf ( "   " );
        }
        printf ( "\n" );
    }
    for ( i = 1; i <= 5; i++ )
        printf ( " * " );
    return 0;
}

```


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```

int main() {
    int i, j;
    for (i=1; i<=5; i++) {
        for (j=1; j<=5; j++) {
            if (j>=5 || j==6-i) {
                if (i==5) {
                    for (i=1; i<=5; i++)
                        printf(" * ");
                    exit(0); }
            else
                printf(" * ");
        }
        else
            printf(" "); }
        printf("\n"); }
    return 0; }

```

16.

```

int main() {
    int i, j;
    for (i=1; i<=5; i++) {
        for (j=1; j<=9; j++) {
            if (j==6-i || j==4+i) {
                if (i==5) {
                    for (i=1; i<=9; i++)
                        printf(" * ");
                    exit(0); }
            else
                printf(" * "); }
            else
                printf(" "); }
        printf("\n"); }
    return 0; }

```

```
17 { int main()
```

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

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

```
      { for (j=1; j<=9; j++)
```

```
        if (j==i || j==10-i)
```

```
        { if (j==1)
```

```
          { for (j=1; j<=9; j++)
```

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

```
          }
```

```
        else
```

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

```
        }
```

```
      else
```

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

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

```
  } return 0;
```


18

```
{ 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 ( " * " );
```

```
            else
```

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

```
        }
```

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

```
    }
```

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

```
    {
```

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

```
        {
```

```
            if ( j >= 1 + i && j <= 9 - i )
```

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

```
            else
```

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

```
        }
```

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

```
    }
```

```
    return 0;
```

```
}
```

13

```

int main() {
    int i, j, x;
    for (i = 1; i <= 3; i++) {
        for (j = 1; j <= 19; j++) {
            if ((j >= 4 - i && j <= 6 + i) || (j >= 14 - i && j <= 16 + i))
                printf("*");
            else
                printf(" ");
        }
        printf("\n");
    }
    for (i = 1; i <= 19; i++) {
        if (i == 7) {
            x = printf("Mysir G");
            i = i + x - 1;
        }
        else
            printf("*");
        printf("\n");
    }
    for (i = 1; i <= 9; i++) {
        for (j = 1; j <= 18; j++) {
            for (j = 1; j <= 18; j++) {
                if (j >= 1 + i && j <= 19 - i)
                    printf("*");
                else
                    printf(" ");
            }
            printf("\n");
        }
        return 0;
    }
}

```