

Nested loops - Practice code

Problem Statement 1: Nested For Loops

Create a JavaScript program that displays the value of inner for loop for each outer iteration, as well as outer for loop.

Nested For loop

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

Problem Statement 2: Tables using nested for loop

Print tables using nested for loop.

Tables:

1 * 1 = 1	2 * 1 = 2
1 * 2 = 2	2 * 2 = 4
1 * 3 = 3	2 * 3 = 6
1 * 4 = 4	2 * 4 = 8
1 * 5 = 5	2 * 5 = 10
1 * 6 = 6	2 * 6 = 12
1 * 7 = 7	2 * 7 = 14
1 * 8 = 8	2 * 8 = 16
1 * 9 = 9	2 * 9 = 18
1 * 10 = 10	2 * 10 = 20

Problem Statement 3: Triangle numbers

Write a JavaScript program to display a triangle of numbers using a nested for loop.

Displaying a triangle of numbers:

```
1
12
123
1234
12345
```

Problem Statement 4: Right Triangle pattern

Create a JavaScript program to display the right triangle pattern of numbers.

Displaying Right Triangle Pattern:

```
1
22
333
4444
55555
```

Solution Scripts:

Problem Statement 1:

```
// Outer for loop.
for(var i = 1; i <= 3; i++)
{
    document.write(i, "<br>"); // will execute 3 times.
// Inner for loop.
for(var j = 1; j <= 4; j++)
{
    document.write(j, " "); // will execute 12 (3 * 4) times.
}
document.write("<br>");
}
```

Problem Statement 2:

```
let i, j;
document.write("Tables:", "<br>");
// Outer for loop.
for(i = 1; i <= 2; i++)
{
// Inner for loop.
for(j = 1; j <= 10; j++)
{
    document.write(i+ " * " +j+" = "+ (i*j), "<br>");
}
document.write("");
}
```

Problem Statement 3:

```
let i, j;
document.write("Displaying a triangle of numbers:", "<br>");
// Outer for loop.
```

```
    for(i = 1; i <= 5; i++)
    {
// Inner for loop.
        for(j = 1; j <= i; j++)
        {
            document.write(j);
        }
        document.write("<br>");
    }
}
```

Problem Statement 4:

```
    let i, j;
    document.write("Displaying Right Triangle Pattern:", "<br>");
// Outer for loop.
    let k = 1;
    for(i = 1; i <= 5; i++)
    {
// Inner for loop.
        for(j = 1; j <= i; j++)
        {
            document.write(k);
        }
        document.write("<br>");
        k++;
    }
}
```