

```
JS demo.js x
JS demo.js > ...
1 const prompt = require("prompt-sync")();
2 let n = parseInt(prompt("Enter Range : "));
3 for(let i = 1; i <= n; i++){
4     for(let j = 1; j <= n; j++){
5         if((j == 1) || (j == n))
6             process.stdout.write("* ");
7         else
8             process.stdout.write(" ");
9     }
10    console.log();
11 }
```

```
PS E:\HTML_CSS_JS> node demo.js
Enter Range : 10
*
*
*
*
*
*
*
*
*
*
PS E:\HTML_CSS_JS>
```

```
JS demo.js x
JS demo.js > ...
1 const prompt = require("prompt-sync")();
2 let n = parseInt(prompt("Enter Range : "));
3 for(let i = 1; i <= n; i++){
4     for(let j = 1; j <= n; j++){
5         if((i == n / 2 + 1) || (j == n / 2 + 1))
6             process.stdout.write("* ");
7         else
8             process.stdout.write(" ");
9     }
10    console.log();
11 }
```

```
PS E:\HTML_CSS_JS> node demo.js
Enter Range : 10
*
*
*
*
*
*
*
*
*
*
PS E:\HTML_CSS_JS>
```

```
JS demo.js x
JS demo.js > ...
1 const prompt = require("prompt-sync")();
2 let n = parseInt(prompt("Enter Range : "));
3 for(let i = 1; i <= n; i++){
4     for(let j = 1; j <= n; j++){
5         if((i == j) || (i + j == n + 1))
6             process.stdout.write("* ");
7         else
8             process.stdout.write(" ");
9     }
10    console.log();
11 }
```

```
PS E:\HTML_CSS_JS> node demo.js
Enter Range : 10
*
*
*
*
*
*
*
*
*
*
PS E:\HTML_CSS_JS>
```

```
JS demo.js x
JS demo.js > ...
1 const prompt = require("prompt-sync")();
2 let n = parseInt(prompt("Enter Range : "));
3 for(let i = 1; i <= n; i++){
4     for(let j = 1; j <= n; j++){
5         if((i == 1) || (j == 1) || (i == n) || (j == n))
6             process.stdout.write("* ");
7         else
8             process.stdout.write(" ");
9     }
10    console.log();
11 }
```

```
PS E:\HTML_CSS_JS> node demo.js
Enter Range : 10
*
*
*
*
*
*
*
*
*
*
PS E:\HTML_CSS_JS>
```


The screenshot shows the Visual Studio Code editor with a file named `demo.js` open. The code in the file is as follows:

```
1 const prompt = require("prompt-sync")();
2 let n = parseInt(prompt("Enter Range : "));
3 for(let i = 1; i <= n; i++){
4     for(let j = 1; j < i; j++){
5         process.stdout.write(" ");
6     }for(let k =i; k <= n; k++){
7         if(k == i || k == n || i == 1)
8             process.stdout.write("* ");
9         else
10            process.stdout.write(" ");
11     }console.log();
12 }
```

Below the code editor, a PowerShell terminal window is open, showing the command `node demo.js` being executed. The output of the command is a pattern of asterisks (*) forming a right-angled triangle, with the prompt "Enter Range : 10" visible above the pattern.

```
JS demo.js > ...
1 const prompt = require("prompt-sync")();
2 let n = parseInt(prompt("Enter Range : "));
3 for(let i = 1; i <= n; i++){
4     for(let j = i; j < n; j++){
5         process.stdout.write(" ");
6     }for(let k=1; k < 2 * i; k++){
7         if(i == n || k == 1 || k == 2 * i - 1)
8             process.stdout.write("* ");
9         else
10            process.stdout.write(" ");
11     }console.log();
12 }
```

```
powershell >
PS E:\HTML_CSS_JS> node demo.js
Enter Range : 10

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

```
PS E:\HTML_CSS_JS>
```

The screenshot shows the Visual Studio Code editor with a file named `demo.js`. The code is as follows:

```
1 const prompt = require("prompt-sync")();  
2 let n = parseInt(prompt("Enter Range : "));  
3 for(let i = n; i >= 1; i--){  
4     for(let j = n; j > i ; j--){  
5         process.stdout.write(" ");  
6     }for(let k = 1; k < 2 * i; k++){  
7         if(i == n || k == 1 || k == 2 * i - 1)  
8             process.stdout.write("*");  
9         else  
10            process.stdout.write(" ");  
11    }console.log();  
12 }
```

The terminal window at the bottom shows the command `node demo.js` being executed. It prompts "Enter Range : 10". The output is a pattern of asterisks (*) forming a diamond shape, representing Pascal's triangle for range 10.

JS demo.js > hollowDiamondPattern1 > symbol

```
1 const prompt = require("prompt-sync")();
2 function hollowDiamondPattern1() {
3     const rows = parseInt(prompt("Enter the number of rows: "));
4     const symbol = prompt("Enter the symbol you want to print: ");
5
6     // prints upper section of the pattern
7     for (let i = 1; i <= rows; i++) {
8         for (let j = rows; j > i; j--) {
9             // prints space
10            process.stdout.write(" ");
11        }
12        // prints symbol
13        process.stdout.write(symbol);
14        for (let j = 1; j < (i - 1) * 2; j++) {
15            // prints space
16            process.stdout.write(" ");
17        }
18        if (i === 1) {
19            // throws cursor to the next line
20            process.stdout.write("\n");
21        } else {
22            // prints symbol and throws cursor to the next line
23            process.stdout.write(symbol + "\n");
24        }
25    }
26}
```

```

27 // prints lower section of the pattern
28 for (let i = rows - 1; i >= 1; i--) {
29     for (let j = rows; j > i; j--) {
30         // prints space
31         process.stdout.write(" ");
32     }
33     // prints symbol
34     process.stdout.write(symbol);
35     for (let j = 1; j < (i - 1) * 2; j++) {
36         // prints space
37         process.stdout.write(" ");
38     }
39     if (i === 1) {
40         // throws cursor to the next line
41         process.stdout.write("\n");
42     } else {
43         // prints symbol and throws cursor to the next line
44         process.stdout.write(symbol + "\n");
45     }
46 }
47 }
48
49 // Call the function to run the code
50 hollowDiamondPattern1();

```

```

PS E:\HTML_CSS_JS> node demo.js
Enter the number of rows: 10
Enter the symbol you want to print: *

```

```

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

```

```

PS E:\HTML_CSS_JS> 

```