Questions discussion

06 June 2023 19:47

	1	2	3	4	5
1	1				
2	0	1			
3	1	0	1		
4	0	1	0	1	
5	1	0	1	0	1

{ 1 → *
0 → # }

{ Increasing Decreasing }
{ * # }

no. of lines = 5

r.no. + col.no. (sum)	r. no.	col no.	Pattern
2	1	1	1
3	2	1	0
4	2	2	1
4	3	1	1
5	3	2	0
6	3	3	1

```
if (sum % 2 == 0)
    cout << 1;
else cout << 0;
```

→ 1   1
2   0 1
→ 3   1 0 1
4   0 1 0 1
→ 5   1 0 1 0 1
1 2 3 4 5

→ 3rd row.
first ch = 1
S — 0
Th — 1
F — 0.

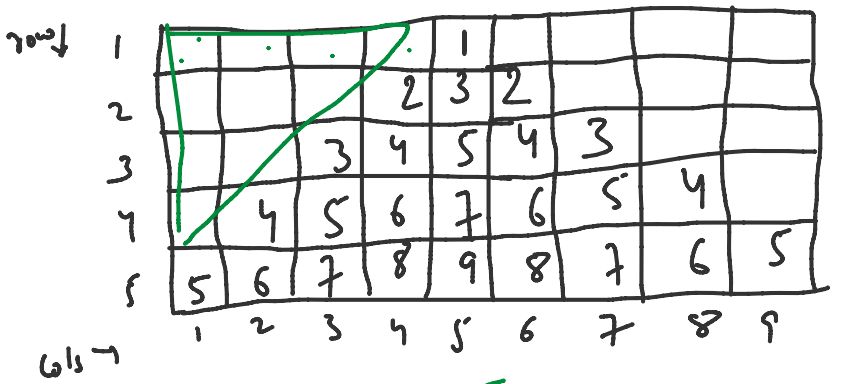
```
if row % 2 == 0.
    f.c = 0;

cout f.c.

if f.c == 0
    f.c = 1
```

f.l = 1

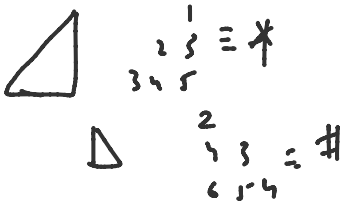
else f.l = 0.



no. of lines = 5

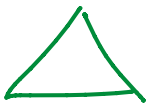
{ r.no. col.no. value.
1 1 space

15x9 → matrix



Spaces logic will be same.

Spaces → (lines - rowno.)



while doing this with stars

for numbers. → (2x rowno. - 1)

stars.

rowno. start.

1 — 1
2 — 2
3 — 3
4 — 4

pattern.

1
2 3 2
3 4 5 4 3
4 5 6 7 6 5 4

num=num-2

rows.

numbers start from rowno.

no. of numbers that are being printed

rowno.	Asc	Desc.
1	1	0
	2	1
2	3	2
3	4	3

Asc → no. of nos. → rowno. → no. of nos.

3 5 3
4 4

Asc → rowno.

Desc → no. of nos.
→ rowno.-1

1st

this is for n = 9

```
1               1
1 2           2 1
1 2 3       3 2 1
1 2 3 4   4 3 2 1
1 2 3 4 5 4 3 2 1
1 2 3 4   4 3 2 1
1 2 3       3 2 1
1 2           2 1
1               1
```

2nd. this is for n = 7

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

empty / hollow hourglass