

* Day-3:- Pattern problem 2

```

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

- Do the following 4 steps and solve any pattern.

* step-1:- Write the pattern in rows and columns -

1 2 3 4 5 ~ columns (J)

1					*
2				*	*
3			*	*	*
4		*	*	*	*
5	*	*	*	*	*

↓

rows (i)

* step-2:- Write the Asterisk / stars in numbers - matrix

1 2 3 4 5 → ①

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

①

</>

∴ J = columns
i = rows

* Notes by vHitem

17-09-2022

Step-3 :- Generalize rows and columns

	1	2	3	4	5
1			$5 \times = 5$		$5 > = 5$
2			$4 \times = 5$		$5 > = 4$
3			$3 \times = 5$		$5 > = 3$
4			$2 \times = 5$		$5 > = 2$
5			$1 \times = 5$		$5 > = 1$

(i) here the sign is $\rightarrow < =$
(less than equal)

(i) or (ii)

note:- here $\boxed{=<=}$ because, as we have to print stars from leftmost numbers to rightmost numbers within them and including them too.

✓ Step 4:- Write down the generalized condition

here we can have varying numbers in left most part by doing this $[6-i]$, because

(i) are those varying numbers in case and $[6-i]$ as we have to initial it with 5

Thus we can write $|J\rangle = 6-i$ / $6-i \langle = J$
 $\langle i \rangle$
 $\langle i \rangle$

~ both are right

acc. to step-3
we have done

$\langle \cdot \rangle$

~ Notes by vHitem