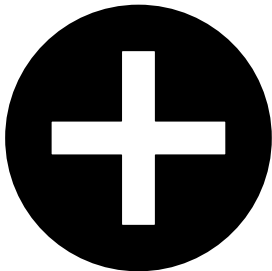


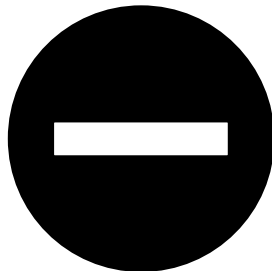
2차원 Prefix Sum 구하기

3	1	5	7	2
9	4	8	9	7
3	9	2	3	6
2	7	5	6	1
4	6	8	5	3
3	5	9	2	7

3	1	5	7	2
9	4	8	9	7
3	9	2	3	6
2	7	5	6	1
4	6	8	5	3
3	5	9	2	7



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9	4	8	9	7
3	9	2	3	6
2	7	5	6	1
4	6	8	5	3
3	5	9	2	7

3	4	9	16	18
12	17	30	46	55
15	29	44	63	78
17	38			

3	1	5	7	2
9	4	8	9	7
3	9	2	3	6
2	7	5	6	1
4	6	8	5	3
3	5	9	2	7

A

3	1	5	7	2
9	4	8	9	7
3	9	2	3	6
2	7	5	6	1
4	6	8	5	3
3	5	9	2	7

S

3	4	9	16	18
12	17	30	46	55
15	29	44	63	78
17	38			

0	0	0	0	0	0
0	3	4	9	16	18
0	12	17	30	46	55
0	15	29	44	63	78
0	17	38			
0					
0					

0	0	0	0	0	0
0	3	4	9	16	18
0	12	17	30	46	55
0	15	29	44	63	78
0	17	38			
0					
0					

Row Column

$S[R + 1][C+1] = A + B - C + D$

$S[R + 1][C + 1] = S[R + 1][C] + S[R][C + 1] - S[R][C] + A[R][C]$

```

const A = [
  [3, 1, 5, 7, 2],
  [9, 4, 8, 9, 7],
  [3, 9, 2, 3, 6],
  [2, 7, 5, 6, 1],
  [4, 6, 8, 5, 3],
  [3, 5, 9, 2, 7],
];

function makePrefixSum(A) {
  let S = JSON.parse(JSON.stringify(A));

  S.unshift(new Array(A[0].length + 1).fill(0));
  for (let i = 1; i < S.length; i++) {
    S[i].unshift(0);
  }

  for (let i = 0; i < A.length; i++) {
    for (let j = 0; j < A[i].length; j++) {
      S[i + 1][j + 1] = S[i + 1][j] + S[i][j + 1] - S[i][j] + A[i][j];
    }
  }

  S.shift();

  for (let i = 0; i < S.length; i++) {
    S[i].shift();
  }

  return S;
}

```

```

[
  [ 0, 0, 0, 0, 0, 0 ],
  [ 0, 3, 1, 5, 7, 2 ],
  [ 0, 9, 4, 8, 9, 7 ],
  [ 0, 3, 9, 2, 3, 6 ],
  [ 0, 2, 7, 5, 6, 1 ],
  [ 0, 4, 6, 8, 5, 3 ],
  [ 0, 3, 5, 9, 2, 7 ]
]

[
  [ 0, 0, 0, 0, 0, 0 ],
  [ 0, 3, 4, 9, 16, 18 ],
  [ 0, 12, 17, 30, 46, 55 ],
  [ 0, 15, 29, 44, 63, 78 ],
  [ 0, 17, 38, 58, 83, 99 ],
  [ 0, 21, 48, 76, 106, 125 ],
  [ 0, 24, 56, 93, 125, 151 ]
]

[
  [ 3, 4, 9, 16, 18 ],
  [ 12, 17, 30, 46, 55 ],
  [ 15, 29, 44, 63, 78 ],
  [ 17, 38, 58, 83, 99 ],
  [ 21, 48, 76, 106, 125 ],
  [ 24, 56, 93, 125, 151 ]
]

```