

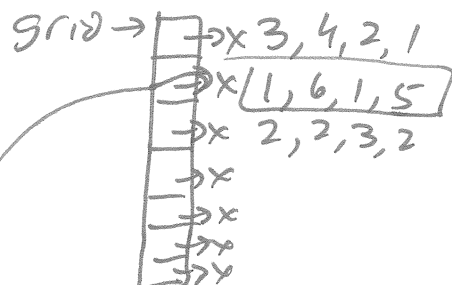
Intro CP 6/8/26

2D Vectors

vector of vectors

`vector<vector<int>>> grid(n);`

int with
value read in



n rows
c cols] read in

```
for (int i = 0; i < n; i++) {  
    for (int j = 0; j < c; j++) {  
        int temp;  
        cin >> temp;  
        grid[i].push_back(temp);  
    }  
}
```

grid[i][j] // row i, col j

3	4	2	1	$\bar{u}=0$
1	6	1	5	$\bar{u}=1$
2	2	3	2	$\bar{u}=2$

`int x = sum(grid[i])`

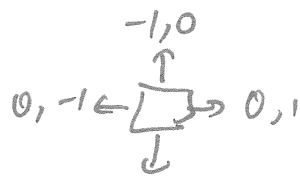
$\bar{u}=1$

Will show DR/DC or DX/DY arrays
in a bit

TODAY'S PROB

- 1) haktari
- 2) epig dance off
- 3) laegdyfirlandinu
- 4) nineknights

DR/DC arrays



DR = { -1, 0, 0, 1 } ;

DC = { 0, -1, 1, 0 } ;

(-1,0)
↑

Dir 0	is	up
Dir 1	is	left
Dir 2	is	right
Dir 3	is	down

// r, c cur

for (int i = 0; i < DR.size(); i++) {

nr = r + DR[i];

nc = c + DC[i];

// Process (nr, nc).

}