i=0

j=0

pic[0] [0]
pic[0] [1]

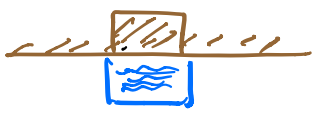
0000

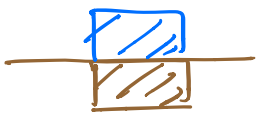
possible cells

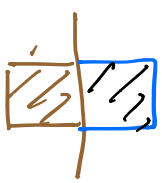
11

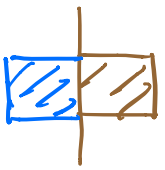
Prop		E W S N 8 7 6 5 4 3 2 1 0
0	No-slip- obstacle →	10
1	free slip Obstacle →	100
2	outflow obstacle →	1000
3	Inflow obstacle →	10000
4	Fluid →	00000 0001

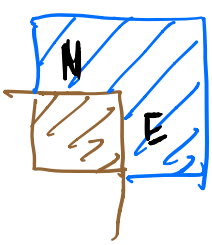
Now I need to check for these 4 types of obstacle further divided into some types acc. to flags / ie pursuing water on which direct.

①  to the South water → 0010

②  to the north water → 0001

③  to the east water → 1000

④  to the West water → 0100

⑤ 

→ 1001

	8	7	6	5	4	3	2	1	0
South water =	0	0	1	0	0	0	0	0	0
+ north water =	0	0	0	1	0	0	0	0	0
+ east water =	1	0	0	0	0	0	0	0	0
+ West water =	0	1	0	0	0	0	0	0	0

N (OR) E

S (OR) E

S (OR) W

N (OR) W

2^8

— Iterate overall loop elements (Not water)

① if (flg (i)(j) ≠ 1)
flag [i] [j] =

flag [i] [j] (→ as value)

+ (flag [i+1] [j]) * 1 (East cell)

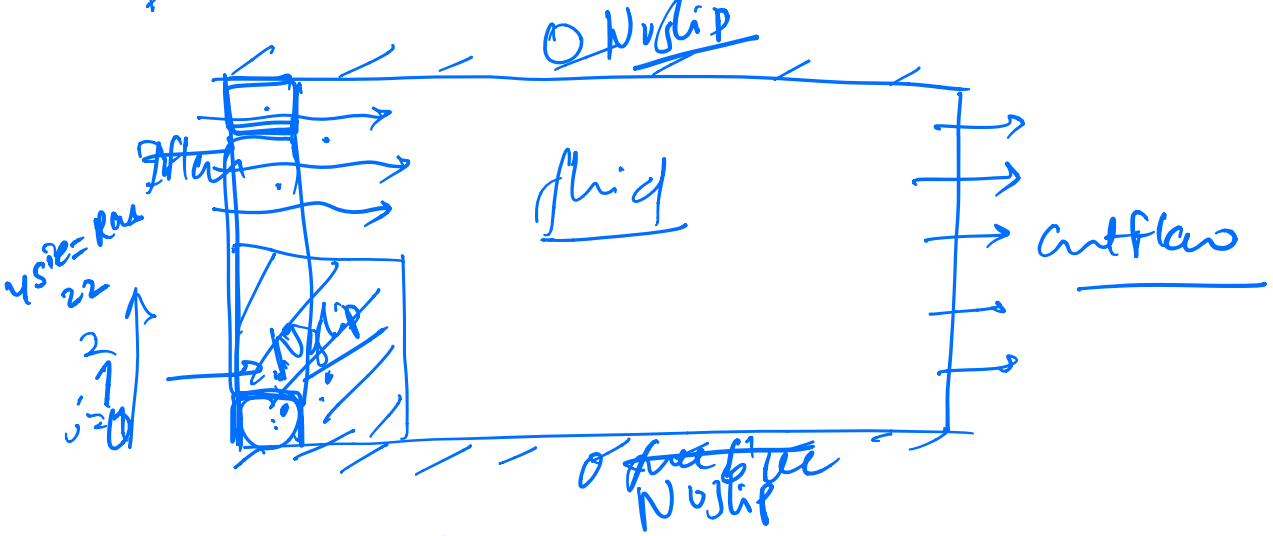
⑥ E S → 1 0 1 0

⑦ W S → 0 1 1 0

⑧ N W → 0 1 0 1

+ (flag[i-1][j]) + 1( )
+ (flag[i][j+1]) + 1( )
+ (flag[i][j-1]) + 1( )

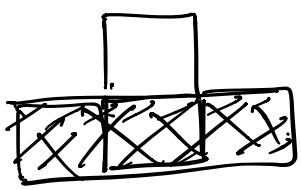
256
+
266



i=0,1,2 - - -

asize = colans = 1012

eg.



if flag[i][j] == 4
dum[i][j] == 1
else dum[i][j] = 0

DJT

```
for (int i=0; i<4; i++)
{
    if (flag[i+1][j] == 4
     flag[i][j] = flg[i][j] + East cell.
    else if (flag[i-1][j] == 4
     flag[i][j] = flag[i][j] + west cell.
    else if
}
```

[i+1][j] East
[i-1][j] West
[i][j+1] North
[i][j-1] South

Possible values of flags

	15 14 13 12 11 10 9 8	7 6 5 4 3 2 1 0	Decimal		This Prob.
	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 1	1	→ Fluid	
No slip-obstacles	1 0 0 0	0 0 0 1 0	258	→ Water to East with No slip condition →	
	0 1 0 0	0 0 0 1 0	130		
	0 0 1 0	0 0 0 1 0	66	→ Water to South with No slip condition →	Top
	0 0 0 1	0 0 0 1 0	34	→ Water to North with No slip cond^n. →	Bottom
	1 0 0 1	0 0 0 1 0	290	→ Water to North-East with No slip condition →	one corner cell
	1 0 1 0	0 0 0 1 0	322		
	0 1 1 0	0 0 0 1 0	194		
	0 1 0 1	0 0 0 1 0	162		
Free slip obstacles	1 0 0 0	0 0 1 0 0	260		
	0 1 0 0	0 0 1 0 0	132		
	0 0 1 0	0 0 1 0 0	68		
	0 0 0 1	0 0 1 0 0	36		
	1 0 0 1	0 0 1 0 0	292		
	1 0 1 0	0 0 1 0 0	324		
	0 1 1 0	0 0 1 0 0	196		
	0 1 0 1	0 0 1 0 0	164		
Outflow condition	1 0 0 0	0 1 0 0 0	264		
	0 1 0 0	0 1 0 0 0	136	→ Water to West with outflow condition →	Right side
	0 0 1 0	0 1 0 0 0	72		
	0 0 0 1	0 1 0 0 0	40		
	1 0 0 1	0 1 0 0 0	296		
	1 0 1 0	0 1 0 0 0	328		
	0 1 1 0	0 1 0 0 0	200		
	0 1 0 1	0 1 0 0 0	168		
Inflow condition	1 0 0 0	1 0 0 0 0	272	→ Water to East with Inflow condition →	left side
	0 1 0 0	1 0 0 0 0	144		
	0 0 1 0	1 0 0 0 0	80		
	0 0 0 1	1 0 0 0 0	48		
	1 0 0 1	1 0 0 0 0	304		
	1 0 1 0	1 0 0 0 0	336		
	0 1 1 0	1 0 0 0 0	208		
	0 1 0 1	1 0 0 0 0	176		
	0 0 0 0	0 0 0 1 0	2	→ No slip obstacles (Not to consider)	