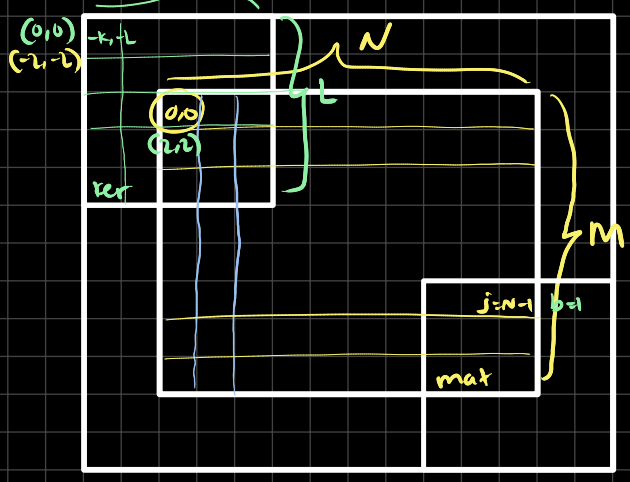
CNN



$K = \lfloor \text{length}/2 \rfloor$ Let $K = 2 = L$

Let padding value = x = 0

```
for (int i = 0; i < M; i++)
  for (int j = 0; j < N; j++)
    int sum = 0
      for(a = -K; a <= K; a++)
        for(b = -L; a <= L; b++)
          sum ± ker[a][b] . mat[i+a][j+b]
```

ker[a][b] — but ker[-2][-2] doesn't exist ?

sum ± ker[a+K][b+L] . mat[i+a][j+b]

ker[0][0] — mat[-2][-2] — now this is doesn't exist

```
if (i+a < 0 || j+b < 0 || i+a > M || j+b > N)
    sum ± ker[a+K][b+L] . x   <- padding
                ker[0,0] . x
else
    sum ± ker[a+K][b+L] . mat[i+a][j+b]
                ker[2][2] . mat[0][0]
```