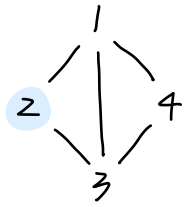

	1	2	3	4
1	0	1	1	1
2	1	0	1	0
3	1	1	0	1
4	1	0	1	0

if $i == j$ $A[i][j] = 0$

Floyd-Warshall

A_0

	1	2	3	4
1	0	3	∞	7
2	8	0	2	∞
3	5	∞	0	1
4	2	∞	∞	0

A_1

	1	2	3	4
1	0	3	∞	7
2	8	0	2	15
3	5		0	
4	2			0

建3層迴圈 $O(n^3)$

$A_1[2,3] = \min(A_0[2,3], A_0[2,1] + A_0[1,3])$
$= \min(2, 8+\infty) = 2$

$A_1[2,4] = \min(A_0[2,4], A_0[2,1] + A_0[1,4])$
$= \min(\infty, 8+7) = 15$

```
for(k=1; k≤n; k++)
{
  for(i=1; i≤n; i++)
  {
    for(j=1; j≤n; j++)
    {
      A[i,j] = min(A[i,j], A[i,k] + A[k,j]);
    }
  }
}
```