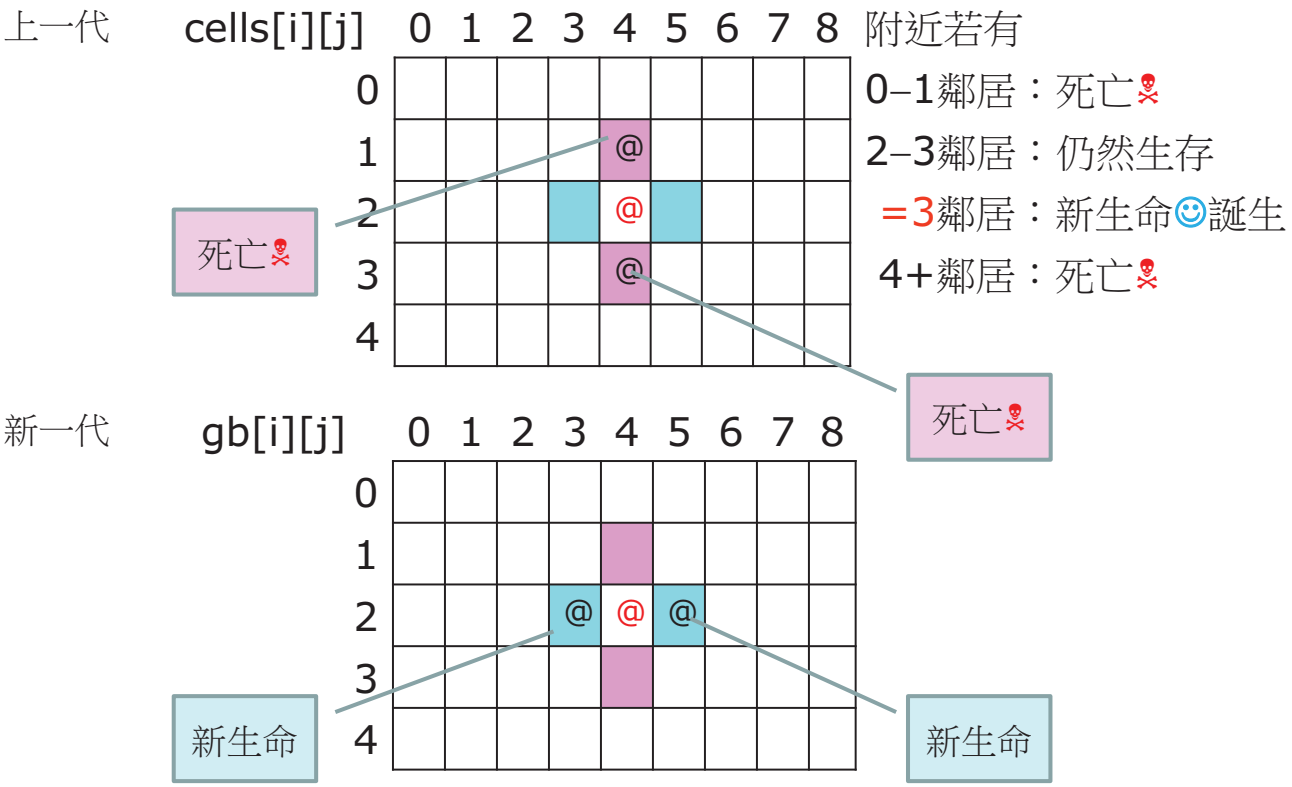
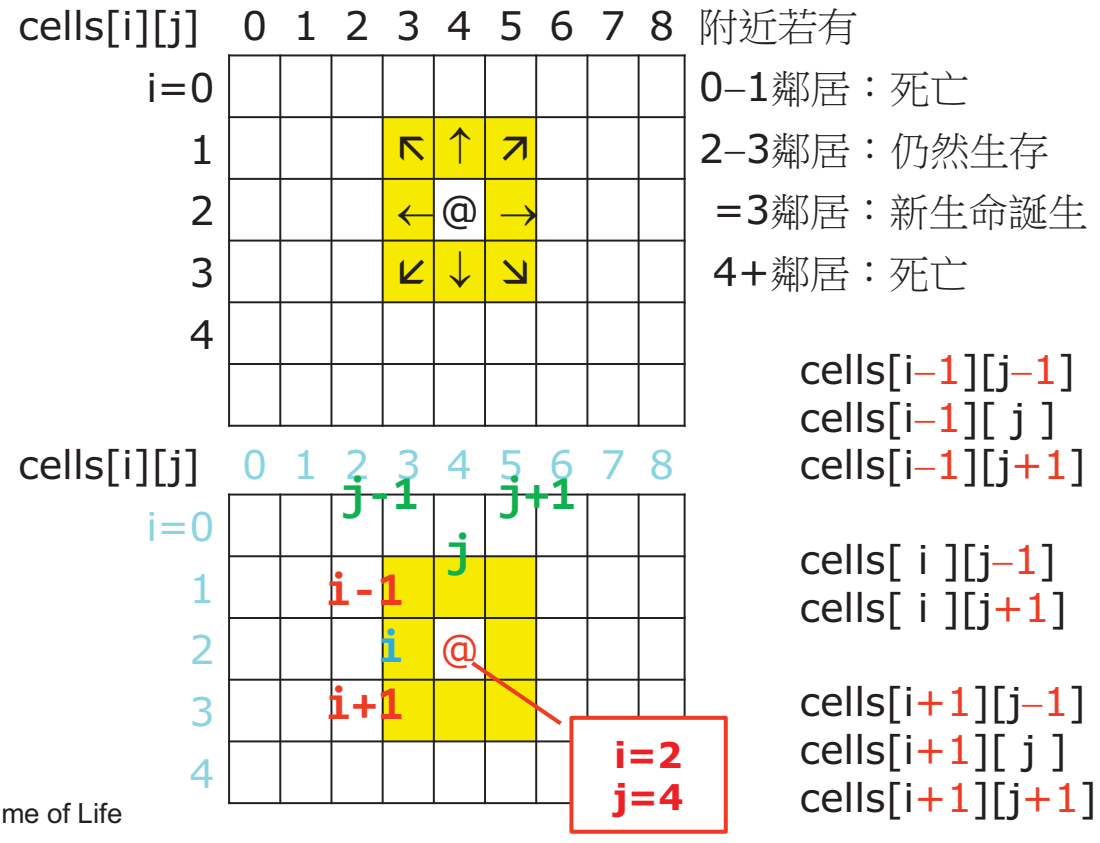
Game of Life

http://megaswf.com/serve/1002859/file/1002859.swf
http://en.wikipedia.org/wiki/Conway's_Game_of_Life



Game of Life

int noOfNeighbours(int i, int j)



```
#define MAX 15
int cells[MAX][MAX];    // 15x15 cells

void displayCells()

void init()

int noOfNeighbours (int m, int n)
```

```
cells[i–1][j–1]
cells[i–1][ j ]
cells[i–1][j+1]

cells[ i ][j–1]
cells[ i ][j+1]

cells[i+1][j–1]
cells[i+1][ j ]
cells[i+1][j+1]
```

測試1

```
void test(){
        int i,j;
        do{
                printf("Q: enter i,j  ");
                scanf("%i%i", &i,&j);

                printf("%i\n", noOfNeighbours(i,j));
        }while(1);
}
```

```
main(){
        srand(time(NULL));
        init();              // 隨機、平均分佈
        displayCells();
        test();
}
```



```
#define MAX 15
int cells[MAX][MAX], gb[MAX][MAX];    // 15x15 cells

void displayCells()

void init()        // random life

int noOfNeighbours (int m, int n)
```

記錄上一代

	1	2	3	4
1	@		@	
2		@	@	
3		@		
4				

```
void game(){
        do{
                nextGeneration();
                displayCells();
                _sleep(1000);
        }while(!endgame());
}
```

	1	2	3	4
1			@	
2	@		@	
3		@	@	
4				

```
main(){
        srand(time(NULL));
        init();
        displayCells();
        game();
}
```

```
if( kbhit() )
        break;
```

	1	2	3	4
1		@		
2			@	@
3		@	@	
4				