Add neighbours which are true

if(l ==0 && m==0)

T | F

if(ArrLis.box[l][m + 1])

T | F

creation.add(l)
creation.add(m)
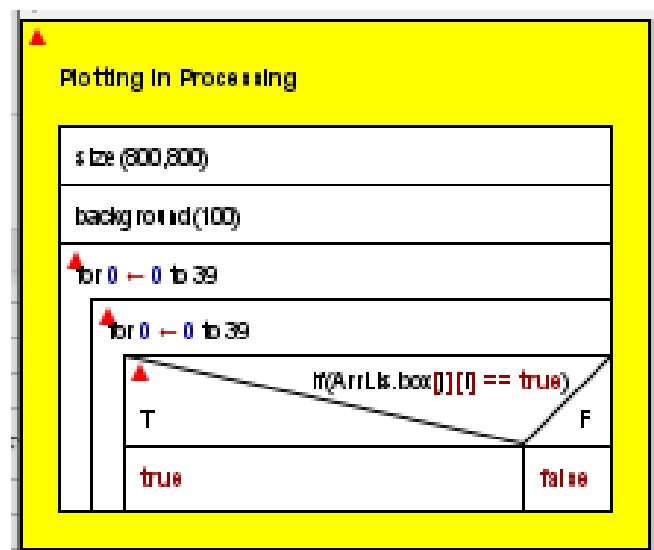
if(ArrLis.box[l + 1][m])

T | F

creation.add(l)
creation.add(m)

if(ArrLis.box[l + 1][m + 1])

T | F

Ø

creation.add(l)
creation.add(m)

Ø

---
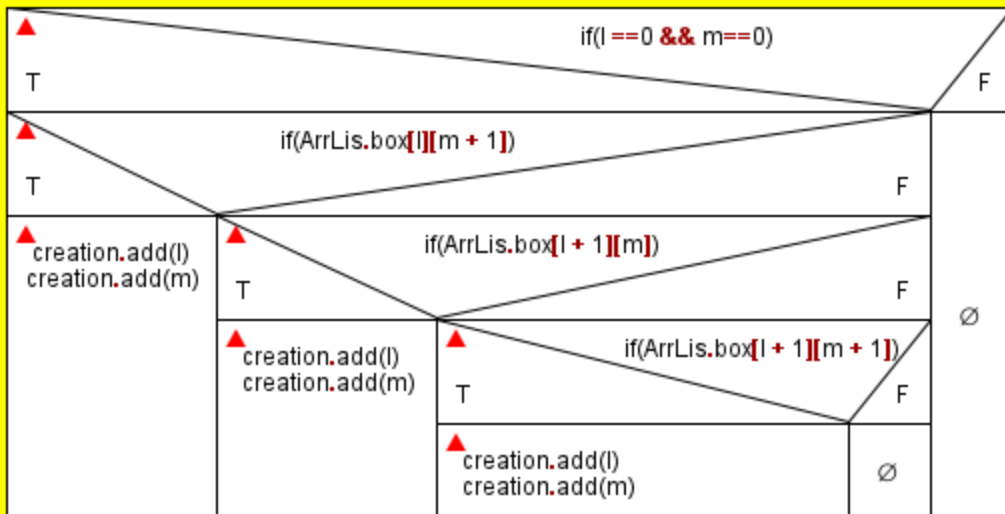
conditions for Living and Dead cells

for 0 ← 0 to 32 by 2

if (ArrLis.box[sortget(s)][sortget(s + f)] == false && cre.get(l) == 3)

T | F

if (ArrLis.box[sortget(s)][sortget(s + f)] == true && cre.get(l) == 3)

T | F

ArrLis.box[sortget(s)][sortget(s + f)] = true

ArrLis.box[sortget(s)][sortget(s + f)] = true

if (ArrLis.box[sortget(s)][sortget(s + f)] == true && (cre.get(l) == 2 || cre.get(l) == 4 || cre.get(l) == 5))

T | F

ArrLis.box[sortget(s)][sortget(s + f)] = true

if (ArrLis.box[sortget(s)][sortget(s + f)] == false)

T | F

ArrLis.box[sortget(s)][sortget(s + f)] = false

if (ArrLis.box[sortget(s)][sortget(s + f)] == false)

T | F

ArrLis.box[sortget(s)][sortget(s + f)] = false

Ø

First life

```
for 0 ← 0 to 39
    for 0 ← 0 to 39
                    (i == 19 && j == 19 || i == 20 && j == 20 || i == 19 && j == 20 || i == 20 && j == 19)
        T                                                                                              F
        ArrLis.box[i][j] = true                              ArrLis.box[i][j] = false
```

Nassi Schneiderman Diagram for creating feild

```
static boolean [] [] box = new boolean [40] [40]
for 0 ← 0 to 39
    for 0 ← 0 to 39
        box[i][j]= false
```

Plotting In Processing

```
size (800,800)
background (100)
for 0 ← 0 to 39
    for 0 ← 0 to 39
                    if(ArrLis.box[i][j] == true)
        T                                      F
        true                        false
```

FirstLife

▼ Attributes ⊕ ⊖
- int s
- int v

▼ Operations ⊕ ⊖
- cre()
- sort()
- sort()
- origionals()
- settings()
- draw()

Rectangle

▼ Attributes ⊕ ⊖
- double w
- double x;
- double y
- double h

▼ Operations ⊕ ⊖
- draw

ArrLis

▼ Attributes ⊕ ⊖
- int i
- int j

▼ Operations ⊕ ⊖
- Create

Plato

▼ Attributes ⊕ ⊖
- int i
- int s

▼ Operations ⊕ ⊖
- RulesOfSurvival

vision

▼ Attributes ⊕ ⊖
- int l
- int s
- ArrayList<Integer> creation

▼ Operations ⊕ ⊖
- automat

First Image pattern for given conditions
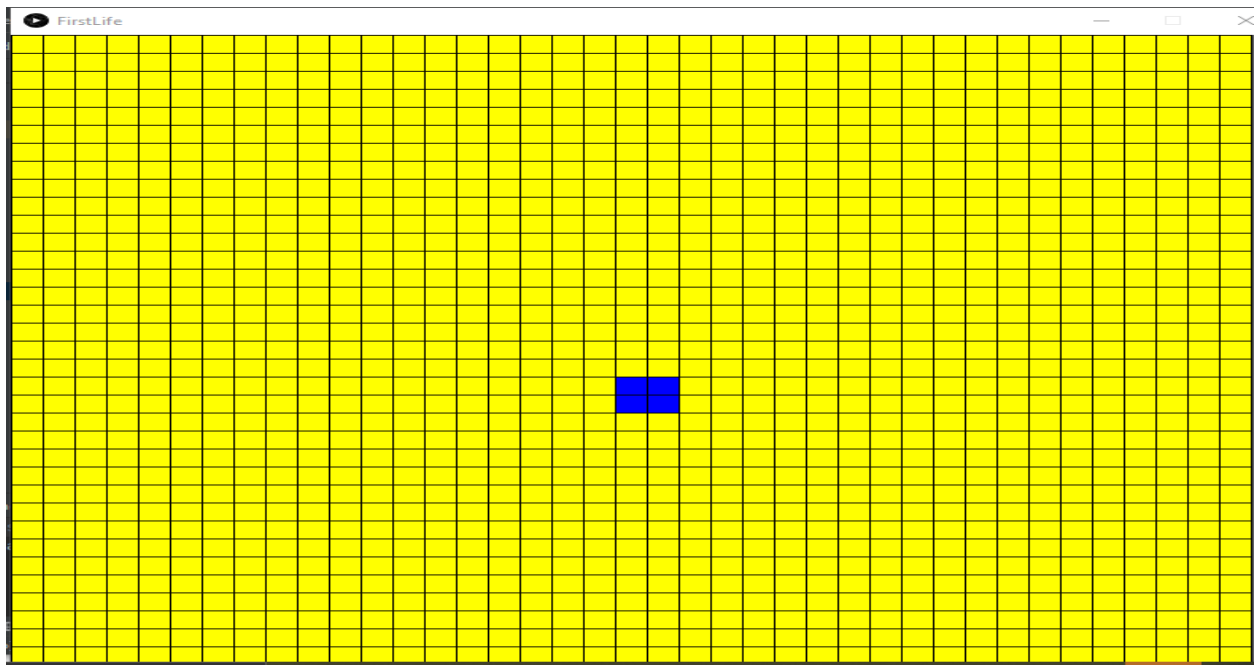
Iteration 5 for 1st evolution
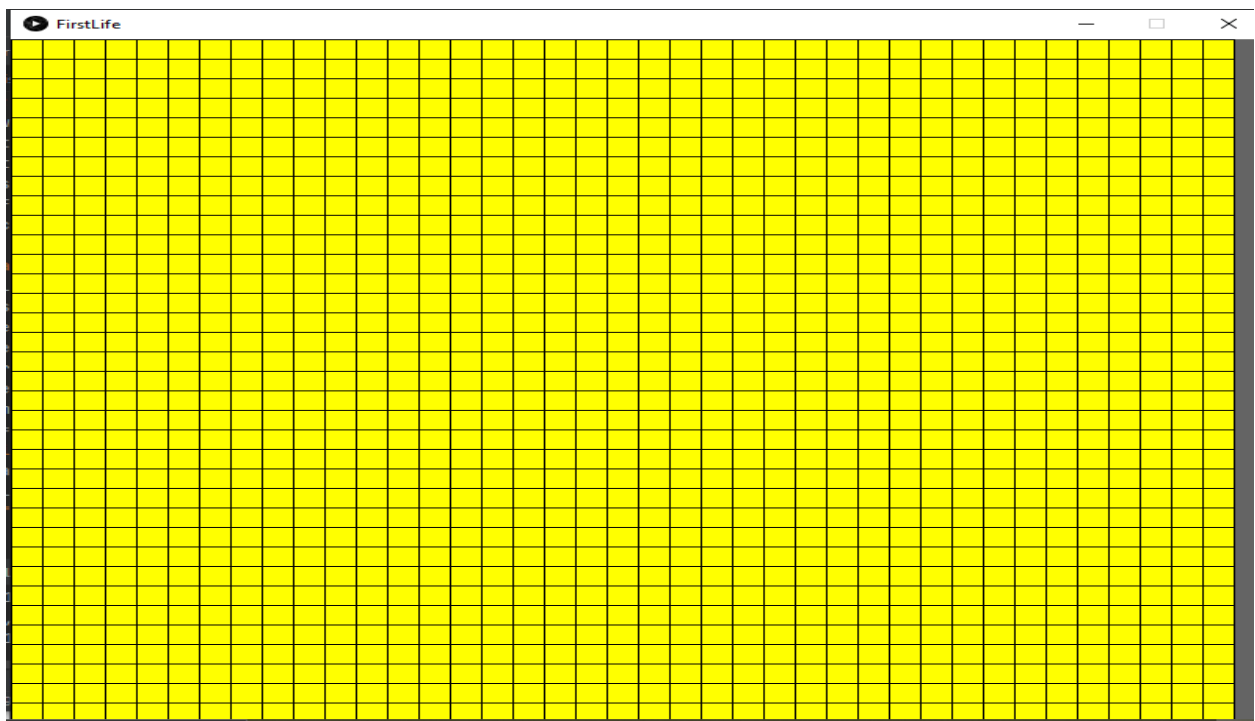
Iteration 10 for 1st
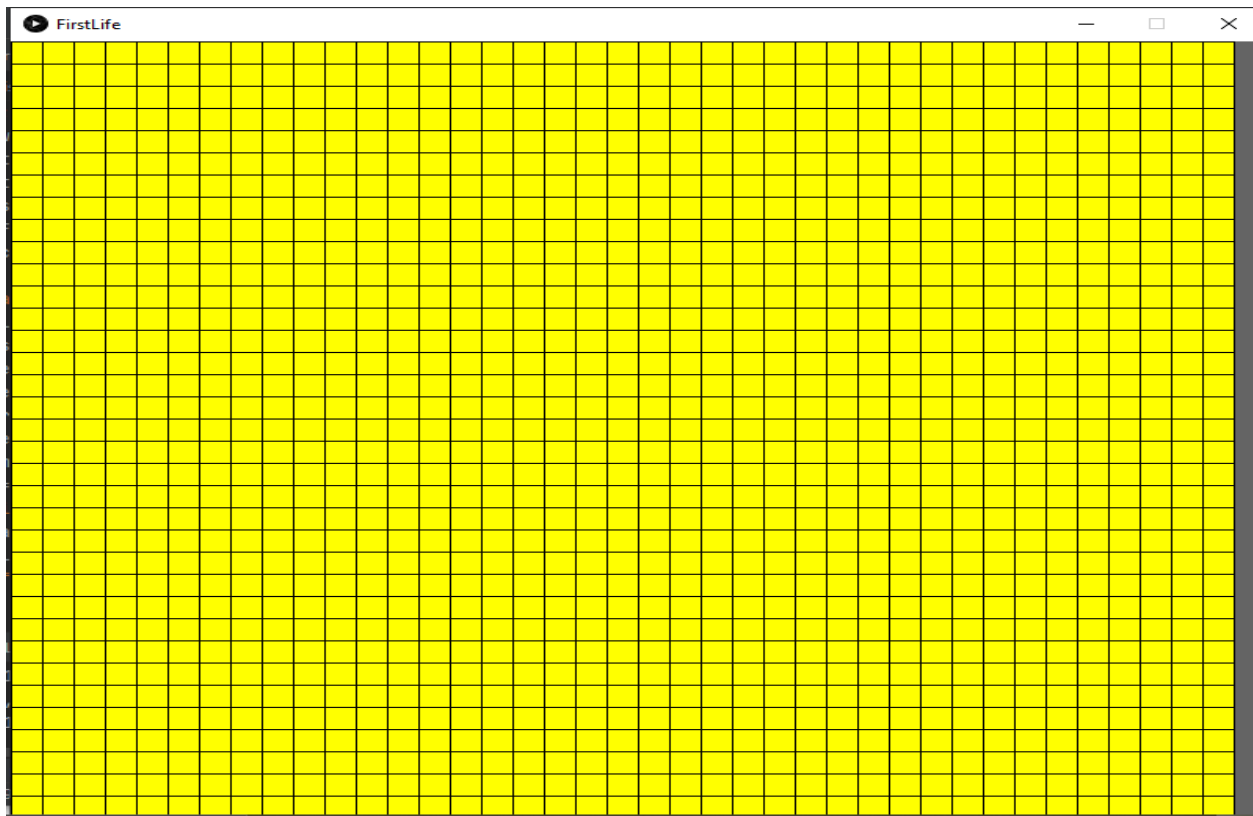
Iteration 50th for 1st evolution
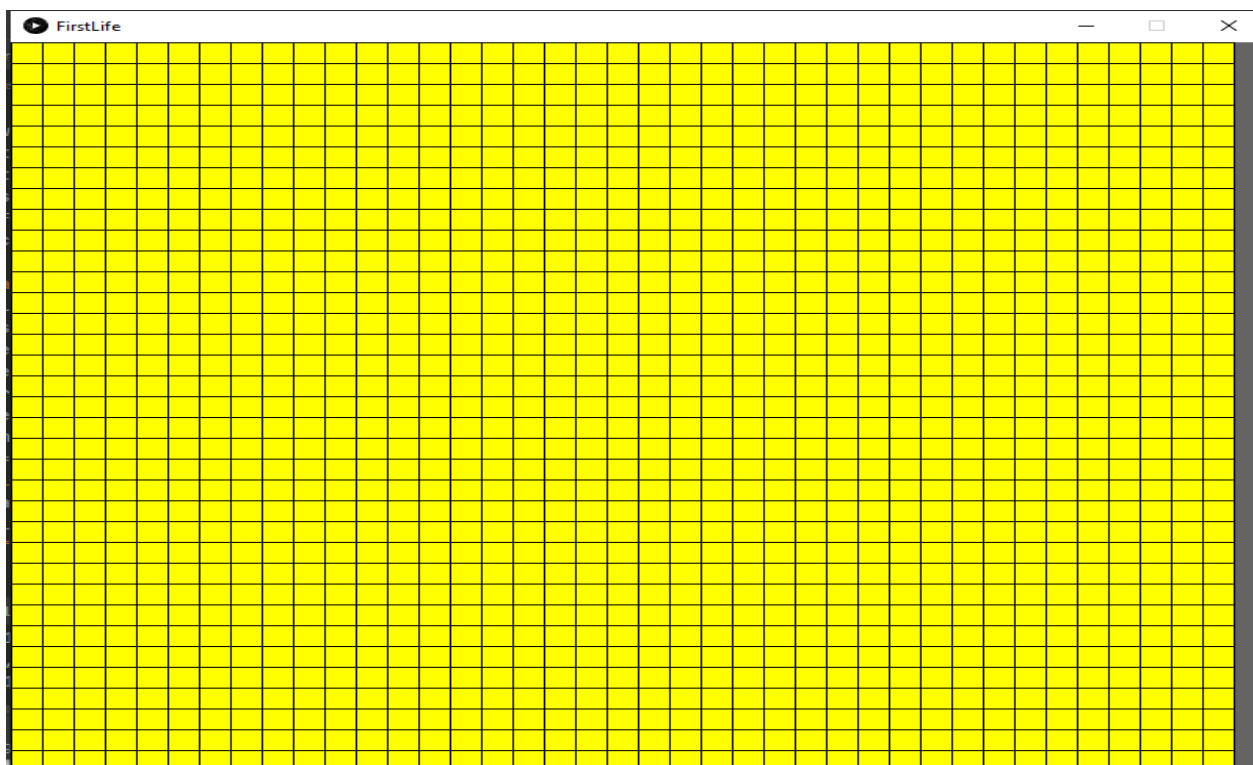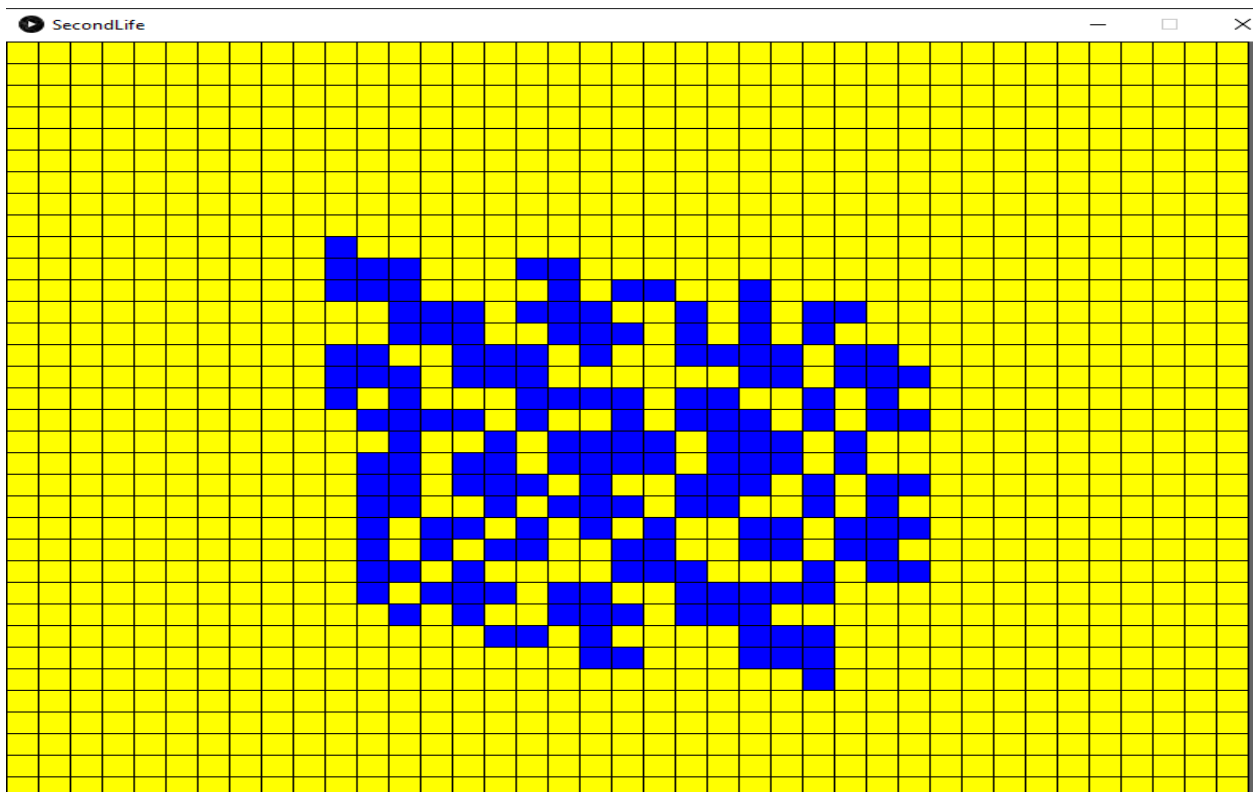
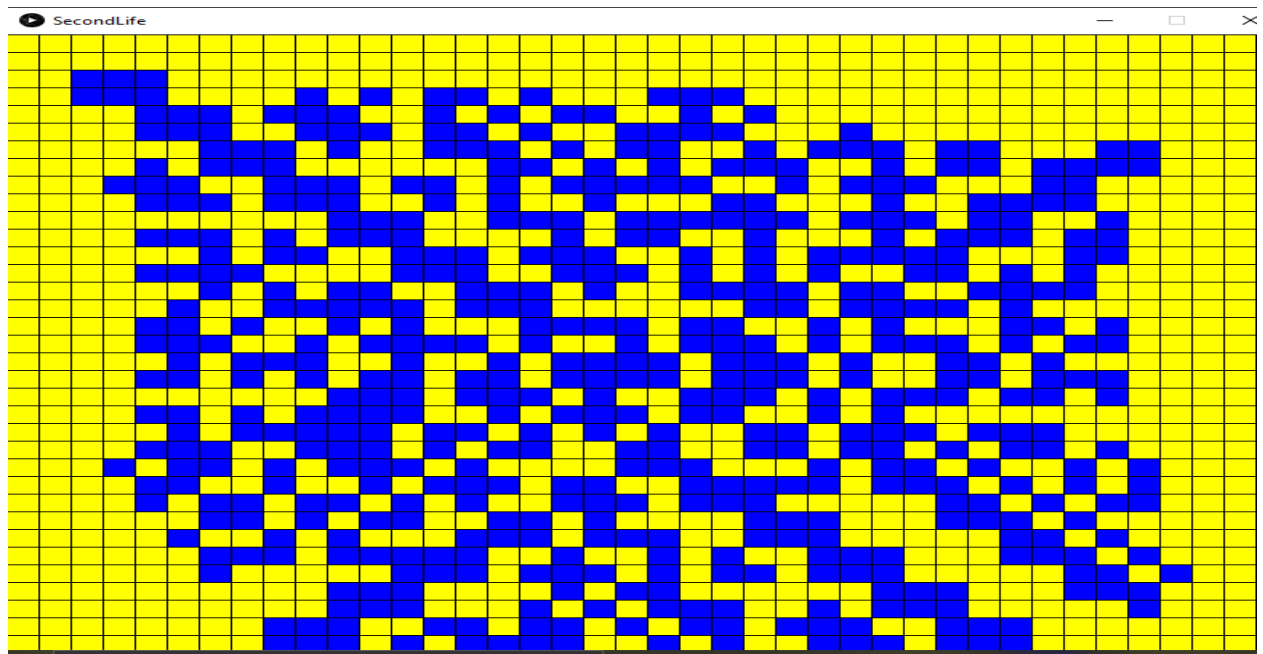Initial Diagram for 2nd Evolution
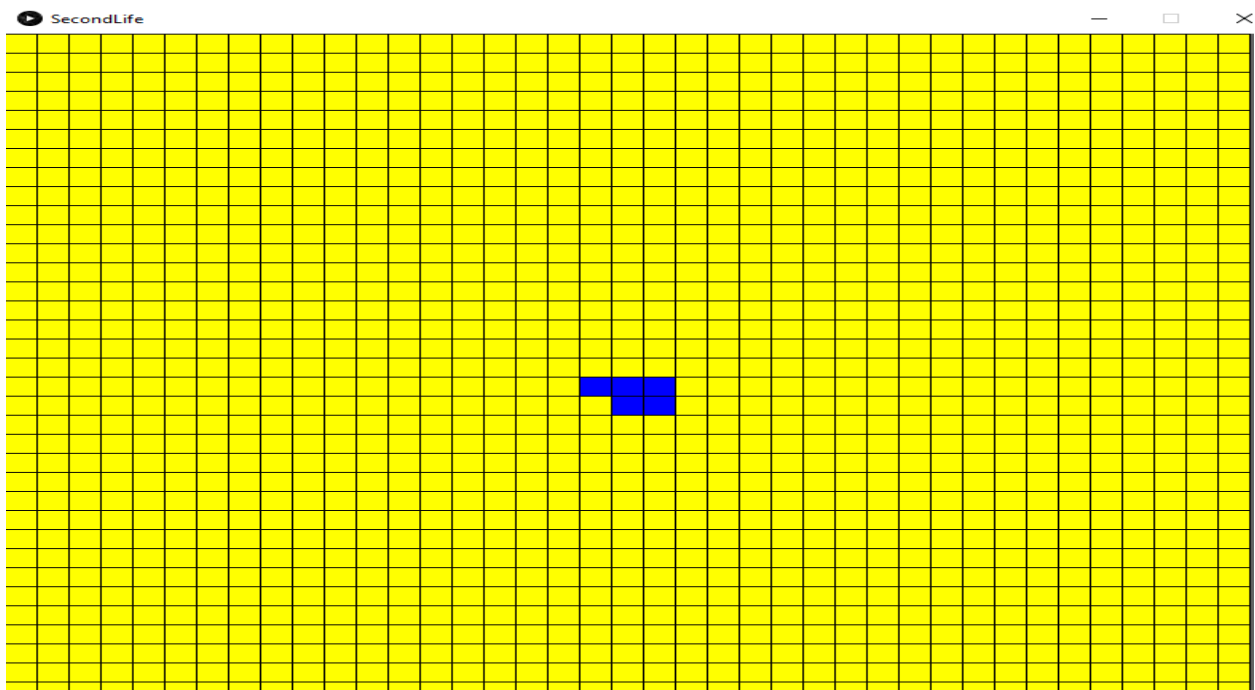
For 5 iterations
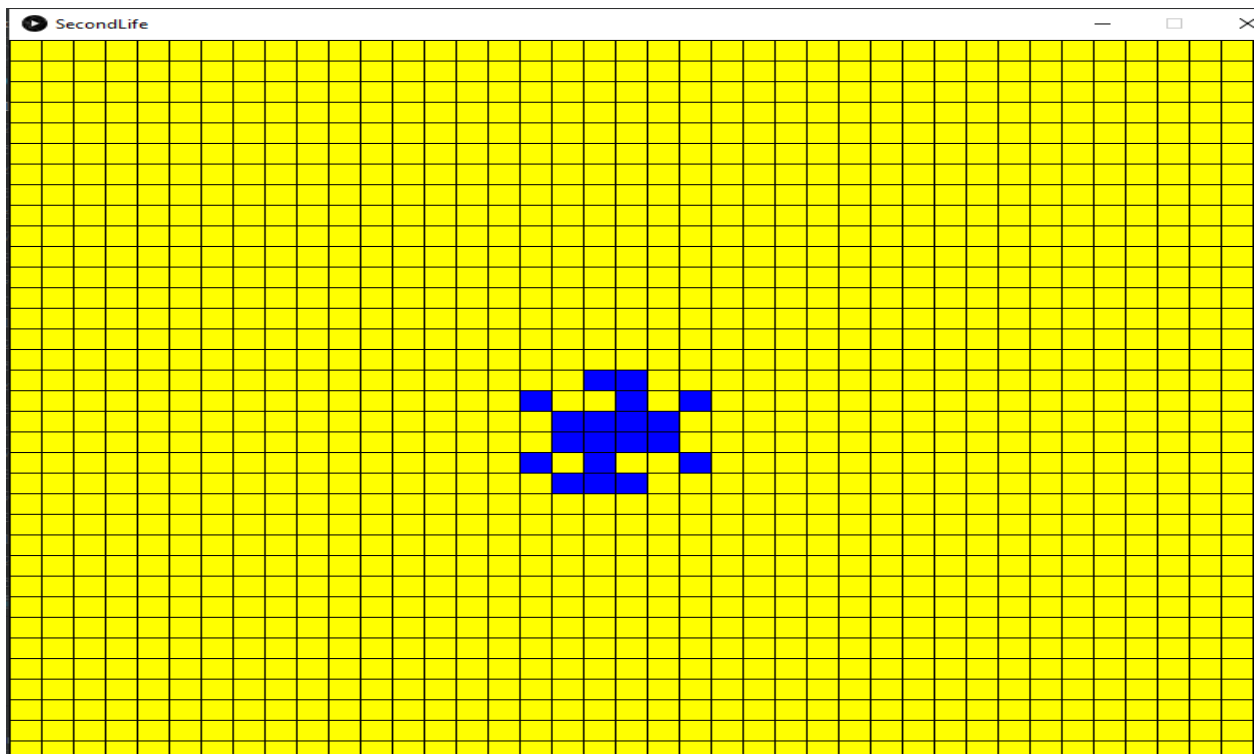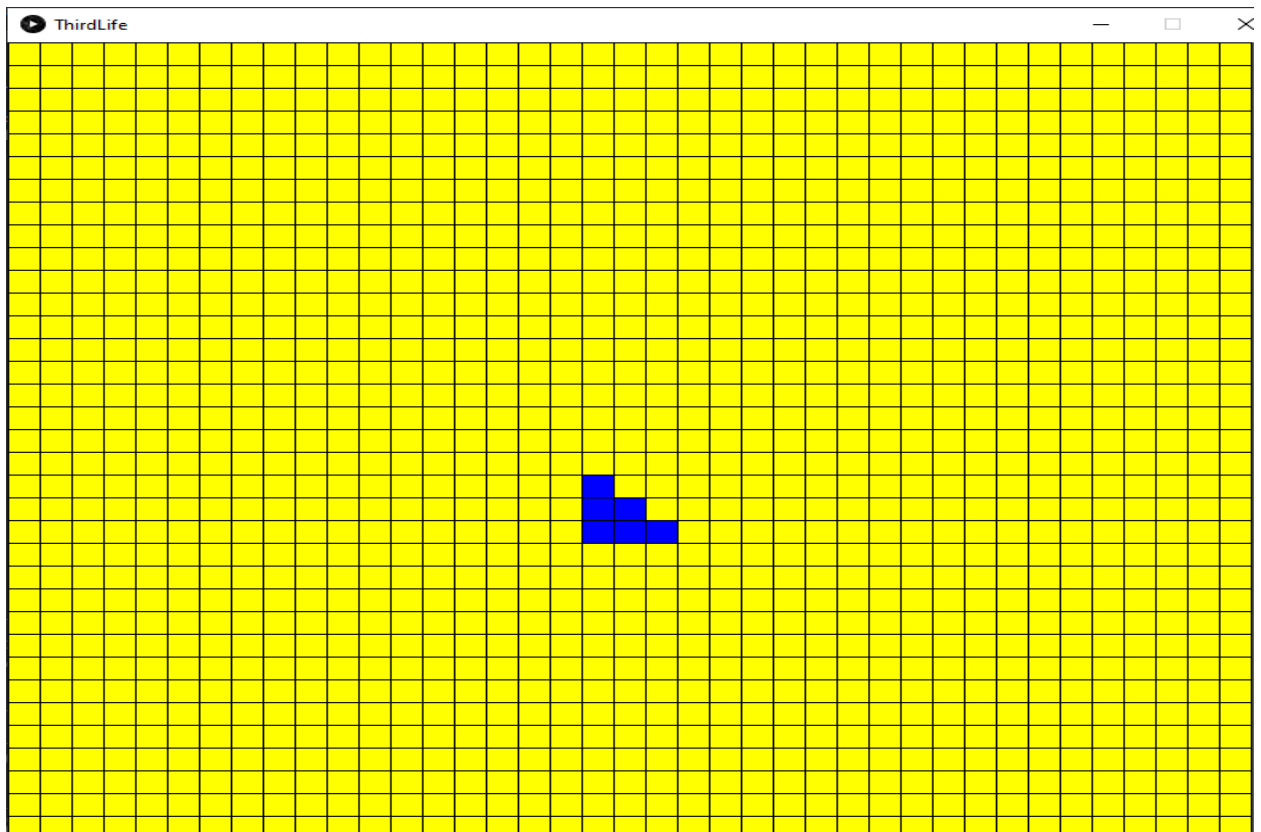
For 10th Iteration
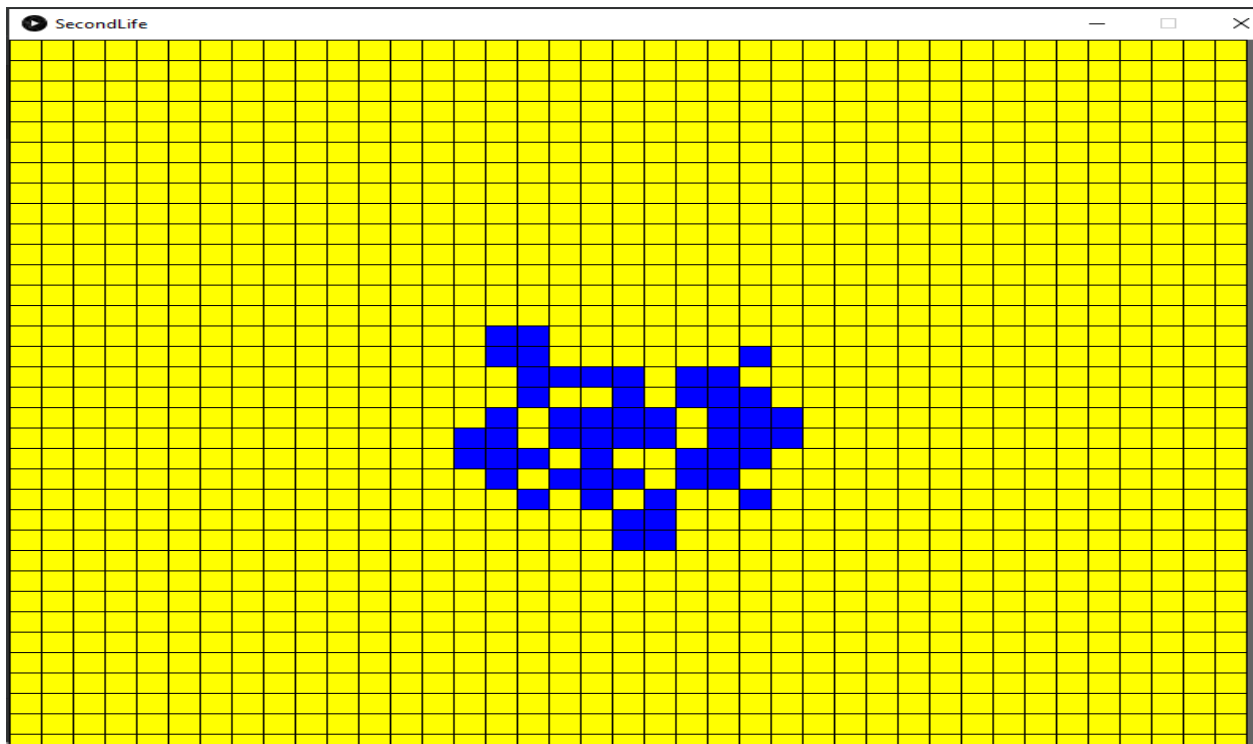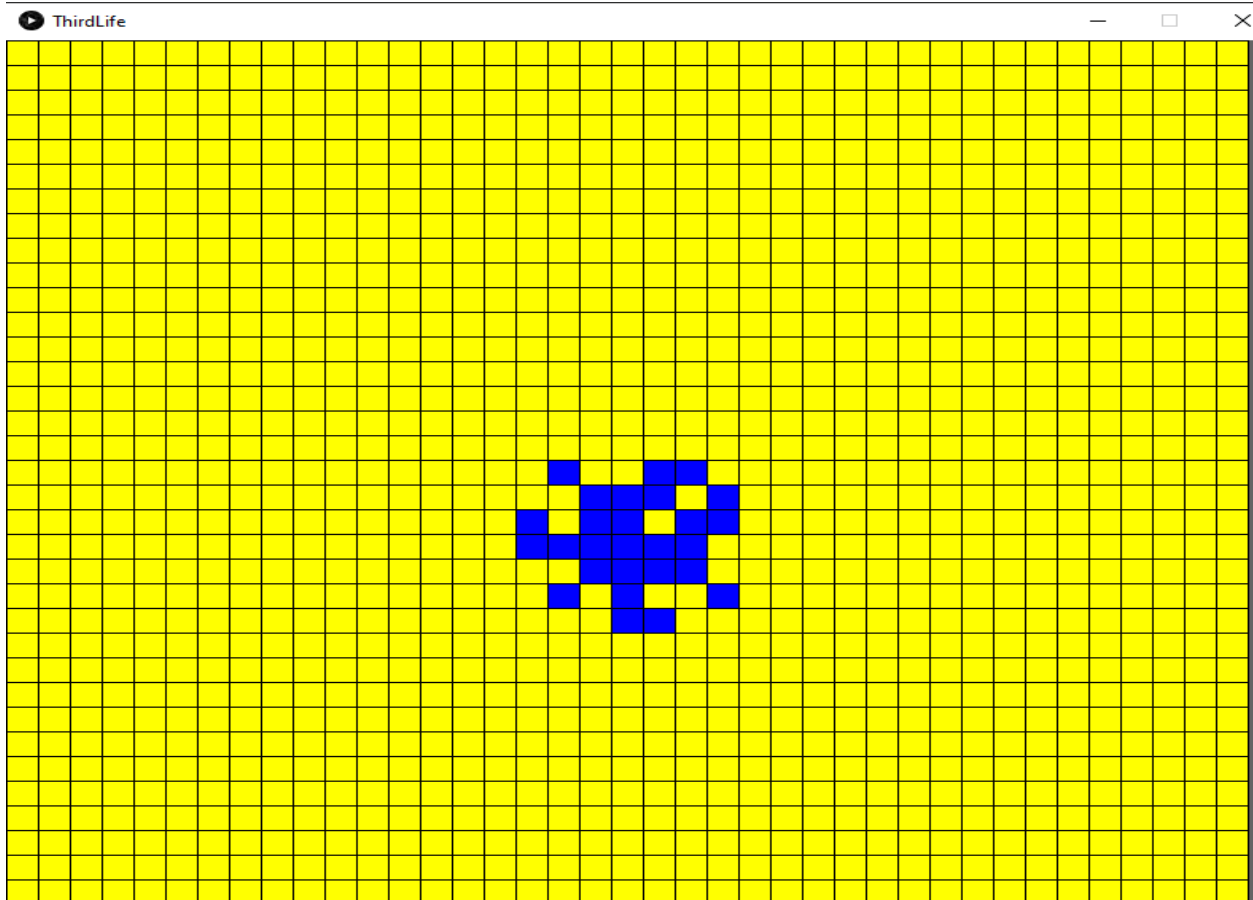

For 20 th Iteration
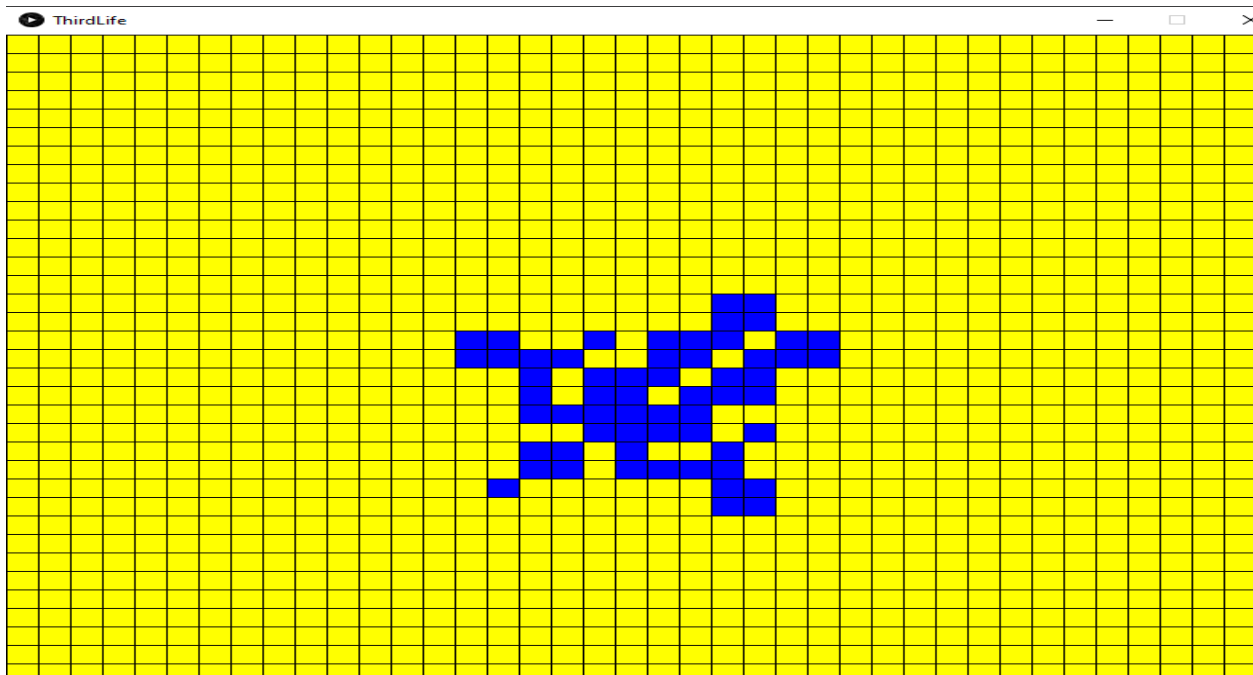
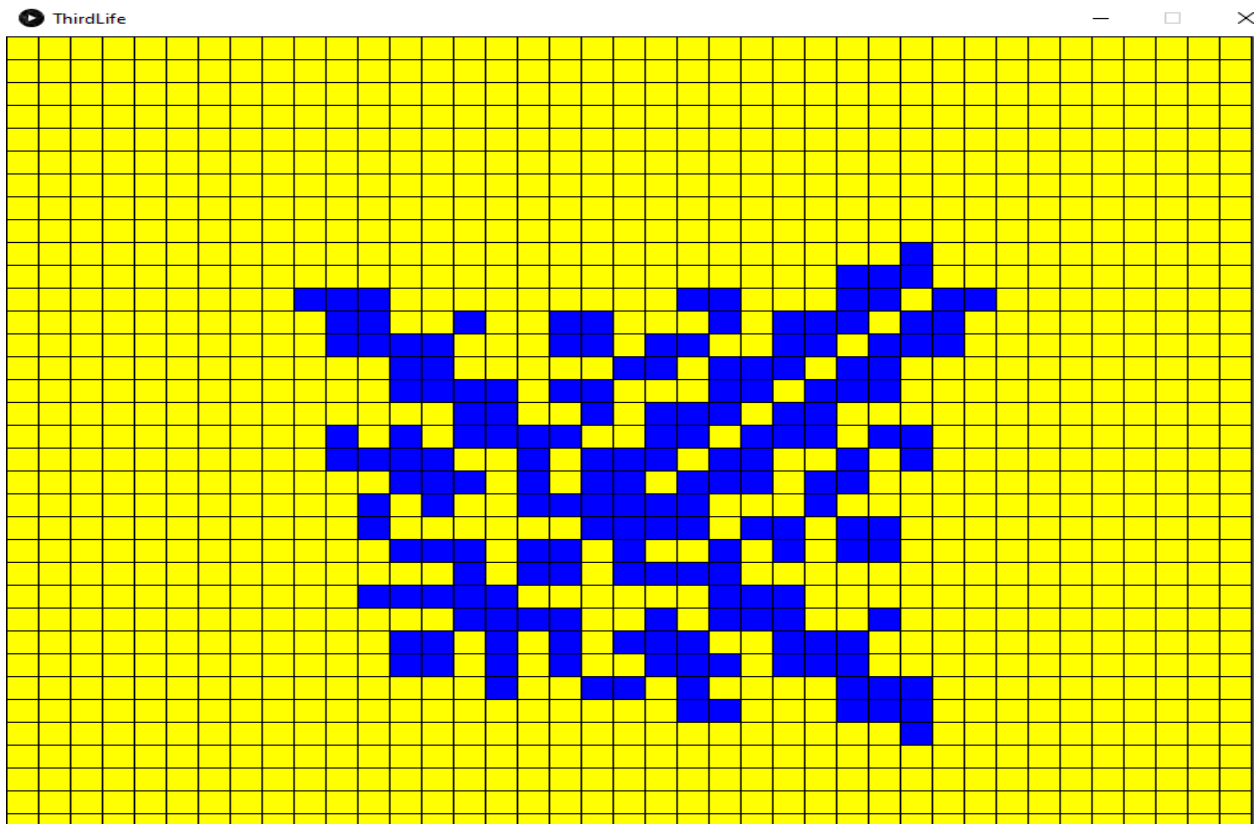For 50th generation

Initial diagram for 3rd Evolution

For 5 th iteration

For 10 iteration

For 20th Iteration

For 50 th Iteration