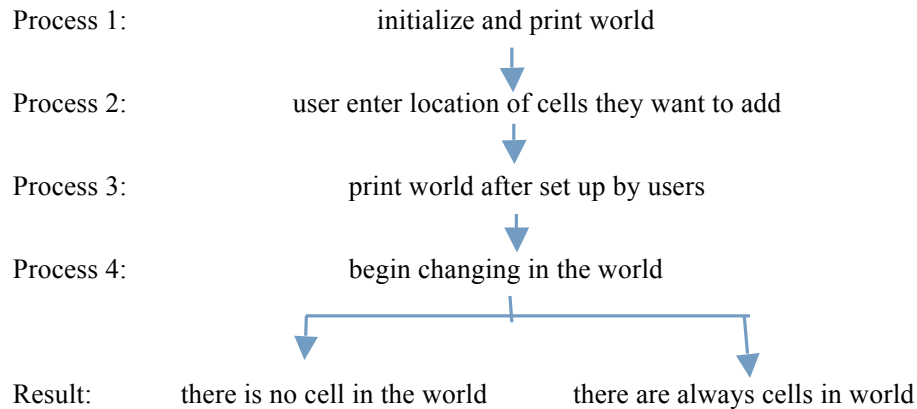


### Design for Assignment 1

There are four processes in this game



Process 1:

- Create world
  - Use pointer to create a 2-D array, and the array means the world cells live (notice: the data type of element of array is a structure which include two char data types)
  - make edge
  - add locations of a glider and a oscillator in the world
  - display the world for users

Process 2:

- Users set up
  - users enter how many number of cells they want to put in this world (notice: check string users enter is number and it is in range)
  - users enter abscissa and ordinate of each cell they want to add (notice: check string users enter is number and it is in range)
- Display the world
  - display the world after users set up

Process 3:

- Determine each element of array
  - check number of neighbor for each element
  - each element of array has two data type, so one data type is used to stored what it print ( has cell or not), another element is used stored what it should change (birth, die and keep). So according to number of neighbor to determine what the element need to change

- according to mark from last step, to modify each element
- display the new world
- make loop

Process 4:

- check number of cells in the world printed every time,
- if there is no life, the loop will stop, and the display “game over”
- if there is a least life always, and loop will not stop

Test:

I enter some locations of cell in the world, it includes cell near edge

Result:

This program is very good