

## Homework Assignment #5 (as email due: Tuesday, February 3, 8:00 am )

**1. Newcomers:** Finish In-Class Work: Game of Life 1. & 2a-c and please put a (readable)copy of your program for 2c into your share.dir.

**Advanced:** Finish In-Class Work: Game of Life 2a-e and please put a (readable)copy of your program for 2e into your share.dir.

(Depending on today's class this may change. Please stay tuned, any changes are announced by email.)

**Update:** Since we did not get started on the programming, there is no program due Febr.3, so 1. got crossed from this assignment.

**2.** Finish the flow chart for the game of life as presented in class. That means, fill in the details for the flow chart of "Apply Rules".

**3.** Start reading the papers (& books) you got for your main project. Work on the background reading, i.e. read carefully of the papers you got: the abstract and the introduction, background, simulation, theory sections. This task helps each of you to become expert in the topic of your main project. For example Deb will read papers which describe which analysis of prime numbers has been done, what has been proven, which conjectures have been made, which numerical work has been done. For example Kyle will look into which computer simulations have been done to compose music. Are there different sets of rules being used? Is the outcome music which is played in public or is it more or less mainly for research? Kerry will read about rules for war games which have been used. Are there common features among different games? Which research has been done to create games which are not ending immediately. All these are only some of the questions I like you to look into. Train yourself with the reading, such that if you would present at a conference of your topic that anybody of the audience could ask you about the background of your topic. (A common question asked at talks is: "In which sense is your work different than the work of ...") There is no need for an answer to this question, but you should start with the reading of the references you got, because it will take many hours of research. Have fun!

**4. Comments:** What of this assignment was most difficult and/or most interesting? Do you have any comments about last class and/or this course?