

CISC 372: Introduction to Parallel Programming
Fall 2007
Group Homework
Due Start of Class, Friday, October 12, 2007

On Friday, October 12, we will be reviewing for the midterm exam by playing jeopardy. To play, we need questions for review at various levels of difficulty and in different classes.

Your task is to work in groups that will be your teams for jeopardy to create 2 easy, 2 medium, and 2 difficult questions for each of the categories below. Your question should be accompanied by your perspective of a correct answer.

Categories:

1. General parallel computing concepts - granularity of parallelism, implicit and explicit parallelism, challenges in parallel computing, ...
2. Models of parallelism/parallel algorithm design – task parallelism, data parallelism, decomposition, agglomeration, spmd, ...
3. Basic MPI commands and point-to-point communication – Init, Finalize, Send and Receive, Bsend, Rsend, Ssend, blocking/nonblocking, buffered/unbuffered
4. Collective MPI commands
5. Data decomposition (decompositions and case studies)

Instructions for creating questions:

- **Avoid long questions involving lots of code to write on the board to give the question. Short snippets are ok, and asking for the players to write short snippets is ok, but more general questions are encouraged.**
- **Label each question with name of group who created the question, level and category.**
- **Put each question and its answer on a separate small piece of paper.**
- **Create a group name and group signal to be used during the jeopardy game to signal you are ready to provide an answer.**
- **Turn in your questions on October 12, start of class.**
- **No one will be answering their own questions during the game.**

Be sure not to miss the jeopardy review day! The winning team will get a choice of prizes.