

# CS430 Project

Due: 11:59PM, Nov. 30, 2018.

**Problem Description:** Consider  $m$  machines and  $n \geq m$  jobs, each of which is specified by a start time and a finish time. Each job can be assigned to any machine, but each machine can serve at most one job at any time. The objective is to schedule a largest number of given jobs to the  $m$  machines. Please develop a polynomial time algorithm and write program to implement it.

You may use any language (*e.g.*, C/C++/JAVA) to implement; and if the language you use is not supported by the TA's computer, you must use your own computer to demo your program. Your program should be able to accept a file input (*e.g.* TXT file) and you may choose the format of the input file associated with the problem.

**Project Report:** You are required to submit a project report by the due date to Blackboard which includes

- algorithm design and pseudocode, a proof of correctness, an analysis of the running time;
- a well commented source code;
- test source data and output;
- a separate README file describing the compiling and the execution of your program..

**Project Demo:** You are required to demonstrate your program to the TA and answer the questions raised by the TA.