Project 4

- Any coding platform and programming language is allowed
- In this project, you are going to code a greedy algorithm and any other algorithm that produces better result for job scheduling problem (Week 9 lesson slides 09-GreedyAlgorithms.pptx)
- This final project is 20 points

Main method

- Assume that we have a 4 processor computer and 100 tasks to complete
- Our processors are named as P1, P2, P3 and P4
- Our jobs are named as J1, J2, J3…J100
- The jobs require the following durations (minute) to get completed respectively (J1, J2, J3…J100)
- 16, 51, 20, 45, 20, 2, 42, 50, 26, 16, 25, 3, 13, 14, 38, 15, 48, 32, 55, 7, 35, 46, 11, 5, 51, 56, 40, 38, 5, 23, 5, 55, 58, 32, 6, 24, 31, 19, 56, 54, 27, 15, 1, 7, 31, 27, 58, 19, 58, 6, 7, 26, 49, 51, 42, 29, 41, 16, 53, 24, 21, 4, 45, 4, 12, 30, 5, 41, 9, 14, 44, 30, 35, 1, 40, 20, 46, 4, 34, 25, 58, 21, 40, 59, 16, 38, 6, 8, 50, 36, 42, 16, 26, 32, 34, 23, 29, 57, 55, 1
- Develop a method that assigns J1, J2, J3…J100 to P1, P2, P3 and P4 by using greedy algorithm
- Develop another method that assigns J1, J2, J3…J100 to P1, P2, P3 and P4 with global optimum solution. For example brute forcing all possible combinations. This another algorithm is up to you.
- Prepare a result file that shows which processor did get which jobs and how many minutes it would take to complete all jobs

- Our primary objective is assigning Jobs to the Processors in a such order that to complete all tasks in the minimum time span
- The result file will be prepared for both Greedy algorithm using method and the other method you have decided to program yourself

Project Delivery

- You have to bring your project and show to me until 24 May 2019. 24.05.2019 is the final date (You have 4 weeks to complete)
- So you need to bring your laptop to show or make your software work on the lab's computer and there we can check
- I ask questions about your coding
- **Prepare a report about your software coding and explain each line of code clearly**
- Also please RAR(Winrar) or ZIP(Winzip) your software (delete debug and obj folder in C# otherwise it won't allow to be attached to email) project and email to furkan.gozukara@toros.edu.tr with including your full name and your student number
- I will individually and carefully check everyone's project source code so do not try to cheat, get from your friends. Otherwise you will get very low score (both the code giving person and the cheater)
- If you fail to deliver your project at the (24.05.2019), each delayed day will cause you a 1 points lower score up to 16 points out of 20
- Before that time, you can bring your homework and show me at my room A015
- Also you can ask any questions about your homework by coming to my room or from email