

# PLP Lab – Assignment 1

Simulation of an interview



#### Assignment

- You are going to develop a C# console application that simulates an interview of a number of students
- The application consists of one sequential solution and two parallel solutions, you should measure execution time for each solution and then compare the results
- You should use blocking and synchronization multithreading techniques to write your code

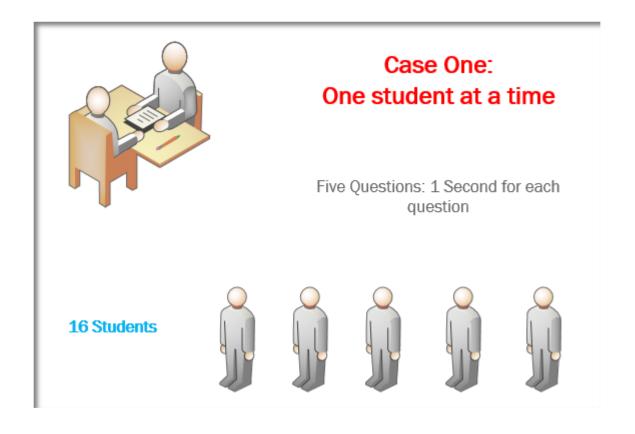


#### Scenario

- 16 Students are going to be interviewed
- The interview consists of 5 questions
- Each question takes 1 second of time
- The interview is going to take place according to the following cases

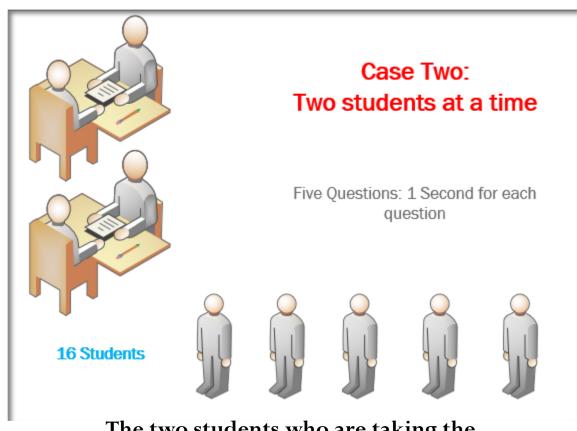


#### Case One: Sequential





## Case Two: Parallel (2)

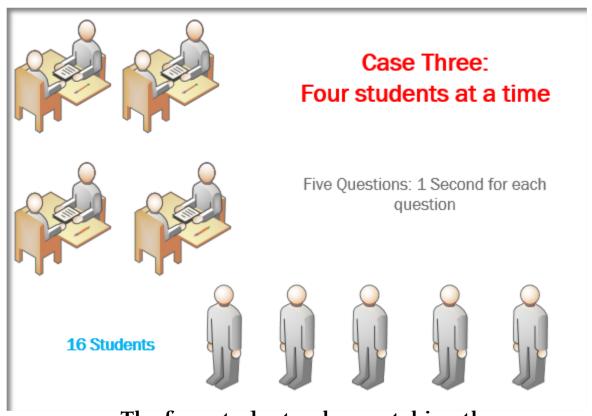


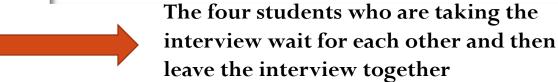


The two students who are taking the interview wait for each other and then leave the interview together



## Case Three: Parallel (4)







#### Important notes

- Write the application and run it
- Create a PDF that contains:
  - The code with your comments
  - Screenshots of the output "Console" during execution
  - Screenshot of the "Threads" window during execution
  - The results (Execution times)
  - Calculation of the speedup and your remarks about the results obtained
- Submit the assignment one week before mid-term via email (adzein@gmail.com)



## GOOD LUCK

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