AP Lab 6 documentation

# GitHub Link to my Lab

https://github.com/herozero777/aplab6

# Introduction

This lab is mainly about solving an assembly line scheduling problem. The problem involves 3 assembly line compared to 2 that we studied in the lectures. As the basic iterative bottom-up algorithm, for 2 assembly lines, has been given to us, our task would be to extend it to 3 assembly lines and make a recursive cousin of it as well. Also there are a couple of other tasks as well.

# Problem

I guess the first task has to be to understand the given algorithm properly and try to implement that so that we can extend it.

* Understand the given algorithm
* Implement that
* Make a recursive algorithm out of it
* Now Implement a 3-lane assembly line via recursion (Task 1)
  + Simple just add another argument in the min function. This is the time chassis takes from the 3rd to the other lanes.
* Now add memorization to the already written code (Task 2)
* Implement the same code using iterative method and also use dynamic programming

# Solution

* Used the PDF given to us by Sir Fahad.
* Function Name: Fastest\_way(….)
* Review a dynamic recursive function to understand how to write a recursive function and then it’s just some coding. linePath(….)
* Done
* Done
* I will be using bottom-up method in dynamic prohramming