Module 5 Workbook

This week and next week we're really going to be bringing together everything that we've learned so far. We've covered a ton of material in this course so far, but I want to make sure that you're really prepared to put this all into practice in your interviews.

You'll notice that there are fewer exercises this week. That's because it is critical that you get practice in an actual interview situation. Therefore, I've left 2 free days for you so that you can schedule 2 mock interviews.

I would recommend scheduling these mock interviews ASAP. If at all possible, **schedule 2 mock interviews this week**. Then simply do the exercises on the days that you aren't doing a mock interview.

As a reminder, here are your options for mock interviewing:

1. Pramp (Free, peer-to-peer mock interviews. **Use our link for unlimited credits**)
2. Gainlo (Paid, interview with an engineer at a top company)
3. Interviewing.io (Free, interview with an engineer at a top company. Long waitlist)

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Day 1

With all the exercises this week, I want you to practice using everything that we've talked about throughout the course. That means following the framework step by step and drawing on all of the techniques that we've covered for breaking down hard problems.

You should also practice these problems using pen and paper or on a whiteboard. If you are coding on the computer, you will simply not be able to develop the comfort level that will get you to succeed in your interviews.

As a quick reminder here is the problem solving framework. Make sure that you are comfortable with each step of the process:

1.	Understand the problem	[3-5 minutes]
2.	Find a brute force solution	[5 minutes]
3.	Optimize your solution	[15 minutes]
4.	Code your solution	[15 minutes]
5.	Test your solution	[5 minutes]

Problems:

1. Remove invalid parentheses (Leetcode)
2. Serialize and deserialize binary tree (Leetcode)

Day 2

With all the exercises this week, I want you to practice using everything that we've talked about throughout the course. That means following the framework step by step and drawing on all of the techniques that we've covered for breaking down hard problems.

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2.	Find a brute force solution	[5 minutes]
3.	Optimize your solution	[15 minutes]
4.	Code your solution	[15 minutes]
5.	Test your solution	[5 minutes]

Problems:

1. Maximum sum path in binary tree (Leetcode)
2. Maximal rectangle (Leetcode)

Day 3

With all the exercises this week, I want you to practice using everything that we've talked about throughout the course. That means following the framework step by step and drawing on all of the techniques that we've covered for breaking down hard problems.

You should also practice these problems using pen and paper or on a whiteboard. If you are coding on the computer, you will simply not be able to develop the comfort level that will get you to succeed in your interviews.

As a quick reminder here is the problem solving framework. Make sure that you are comfortable with each step of the process:

1. Understand the problem	[3-5 minutes]
2. Find a brute force solution	[5 minutes]
3. Optimize your solution	[15 minutes]
4. Code your solution	[15 minutes]
5. Test your solution	[5 minutes]

Problems:

1. Product of array except self (Leetcode)
2. Container with the most water (Leetcode)

Day 4

With all the exercises this week, I want you to practice using everything that we've talked about throughout the course. That means following the framework step by step and drawing on all of the techniques that we've covered for breaking down hard problems.

You should also practice these problems using pen and paper or on a whiteboard. If you are coding on the computer, you will simply not be able to develop the comfort level that will get you to succeed in your interviews.

As a quick reminder here is the problem solving framework. Make sure that you are comfortable with each step of the process:

1.	Understand the problem	[3-5 minutes]
2.	Find a brute force solution	[5 minutes]
3.	Optimize your solution	[15 minutes]
4.	Code your solution	[15 minutes]
5.	Test your solution	[5 minutes]

Problems:

1. Coin change (Leetcode)
2. Binary Tree Lowest Common Ancestor (Leetcode)

Day 5

If you haven't done a mock interview already, make sure to schedule that ASAP.

Day 6

If you haven't done a mock interview already, make sure to schedule that ASAP.

Day 7

Rest day!

We've done a lot this week so I didn't schedule anything for you on this last day. Use this time to take a little break or catch up on anything you may have gotten behind on :)

Workbook Solutions

Day 1

Copy your code verbatim into Leetcode and keep track of any bugs.

1. Remove invalid parentheses (Leetcode, Java Code, Python Code)
2. Serialize and deserialize binary tree (Leetcode, Java Code, Python Code)

Day 2

Copy your code verbatim into Leetcode and keep track of any bugs.

1. Maximum sum path in binary tree (Leetcode, Java Code, Python Code)
2. Maximal rectangle (Leetcode, Java Code, Python Code)

Day 3

Copy your code verbatim into Leetcode and keep track of any bugs.

1. Product of array except self (Leetcode, Java Code, Python Code)
2. Container with the most water (Leetcode, Java Code, Python Code)

Day 4

Copy your code verbatim into Leetcode and keep track of any bugs.

1. Coin change (Leetcode, Java Code, Python Code)
2. Binary Tree Lowest Common Ancestor (Leetcode, Java Code, Python Code)