

Multipliers, Iterative Algorithms, Negative Numbers

Leveraging Adders for a Greater Purpose

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Agenda

1 Announcements

- Project 3

2 Multipliers

- Multiplication in Binary

Announcements

Project 3

- Project 3's been released, and the name of the game is multipliers.
- You'll find everything you need under the 'week 4' section on the course website
- Today's lecture will give you all the background knowledge that you need to know about implementing a multiplier
- More info to come at the end of lecture

Some Reminders

- As the projects become more involved, we'd like to remind you to reach out and attend office hours if you are struggling.
- Additionally, here's a reminder that all projects can be group projects, but you'll have to let us know **4 days** prior to the project's due date if you'll be working in a group. (Max size of 3)

Multipliers

A Question

How does multiplication work in Binary?

Multiplication Table

- Multiplication works the same way in binary as it does in base-10!
- Just like single digit multiplication in base-10 goes up to 9×9 , single digit multiplication in binary goes up to 1×1
- Here's the basic multiplication table for binary:

	0	1
0	0	0
1	0	1