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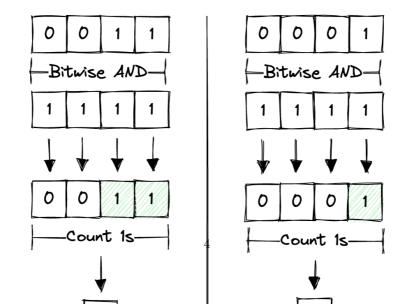
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Introduction

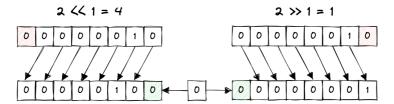
In-progress book about algorithms and data structures in Type-Script. $\,$

Algorithms and Data Structures

- 2.1 Algorithm Analysis
- 2.2 Bits
- 2.2.1 Bit Parity

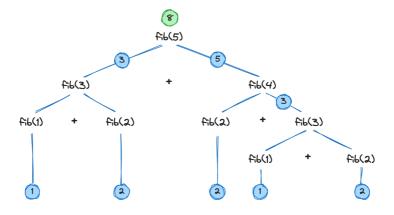


2.2.2 Bit Shift Operator



2.3 Recursion

2.3.1 Fibonacci Sequence



$$fib_n = fib_{n-2} + fib_{n-1}$$

Domain Specific

- 3.1 Language
- 3.1.1 This
- 3.1.2 Event Loop
- 3.1.3 Asynchronous Programming
- 3.1.3.1 Promises
- 3.1.3.2 Async/Await
- 3.1.4 Runtime Environments
- **3.1.4.1** Browser
- 3.1.4.2 Server

Appendix

4.1 Resources

- LeetCode
- Project Euler
- The Algorithm Design Manual
- Elements of Programming Interviews

4.2 Contributing

4.2.1 Getting Started

4.2.1.1 Run Problem Tests

- Install Node Version Manager
- yarn setup
- yarn test --all

4.2.1.2 Compile Book

- Install Pandoc (Homebrew)
- Install BasicTeX (Homebrew)

- Install fswatch (Homebrew)
- make book
- open book/output/index.pdf

4.2.2 Commands

Command	Description	
yarn setup	Setup local development environment	
yarn test	Run tests	
yarn	Generate new LeetCode problem	
gen:leetcode		
yarn	Generate new Project Euler problem	
gen:project-euler		
make book	Compile book to various formats	
make watch	Recompile book automatically when	
	source files change	