100 Pure-Python Projects

1. To-Do List App
2. Notes App
3. Password Strength Checker
4. Random Password Generator
5. Simple Diary/Journal App
6. Contact Book Manager
7. Expense Tracker (file-based)
8. Unit Converter
9. Number Guessing Game
10. Hangman
11. Typing Speed Tester
12. Stopwatch + Timer
13. Alarm Clock
14. Text-Based Calculator
15. Flashcard Tool
16. Book Library Manager
17. Shopping List App
18. File Organizer
19. Activity Logger
20. Basic Text Editor
21. Maze Generator
22. Sudoku Solver
23. Battleship Game
24. Minesweeper
25. Text RPG
26. LRU Cache
27. Huffman Coding
28. Markdown to HTML
29. Directory Tree Visualizer
30. Virtual File System
31. Simple Shell
32. Bank System
33. Polynomial Calculator

34. Sorting Algorithm Visualizer

35. CPU Task Scheduler Simulator

36. Elevator Simulator

37. Chess Move Validator

38. 2048 Game

39. Regex Matcher

40. Expression Evaluator

41. Graph Algorithms Tool

42. Multi-threaded Task Runner

43. Custom JSON Parser

44. Custom YAML Parser

45. Text Diff Tool

46. File Sync Tool

47. Priority Queue

48. Template Engine

49. Mini Logging Framework

50. Text Chess Engine

51. Pathfinding Simulator

52. Dependency Resolver

53. Simple DOM Parser

54. Markdown Renderer

55. Python Minifier

56. Lexer

57. Parser (AST)

58. Bytecode Interpreter

59. Memory Paging Simulator

60. Disk Scheduling Simulator

61. HTTP Server

62. Socket Chat Server

63. DNS Resolver

64. IP Packet Parser

65. ZIP Compressor

66. Browser Cache Simulator

67. Thread Pool

68. AVL Tree

69. Custom Database

70. Static Site Generator

71. Stack VM

72. Code Optimizer

73. 8-bit Emulator

74. Config Parser

75. Raft Simulation

76. Blockchain Simulation

77. Spreadsheet Engine

78. Mini Git

79. Routing Simulator

80. Thread-Safe Queue

81. Full Compiler

82. 2D Physics Engine

83. Ray Tracer

84. 3D Graphics Engine

85. HTML Layout Engine

86. Terminal UI Framework

87. MapReduce Framework

88. Full Text Editor

89. Memory Allocator

90. FAT File System

91. Multi-Agent Simulator

92. Event-Driven Architecture

93. Semantic Analyzer

94. IR Optimizer

95. Assembler

96. Distributed Computing Simulator

97. Bytecode Analyzer

98. 3D Maze Renderer

99. OS Simulator

100. Custom Language Interpreter