🎯 WEEKLY GENERATION PROMPT v8.0 — FOR BATCH CONTENT GENERATION

Version: 8.0
Generated: December 29, 2025, 9:55 PM IST
Status: ☑ OFFICIAL WEEKLY GENERATION PROMPT
Purpose: Generate all weekly instructional & support files systematically

📋 COPY-PASTE WEEKLY GENERATION PROMPT

Use this prompt in your AI chat session to generate complete weekly file sets.

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# 🎓 DSA MASTER CURRICULUM v8.0 — WEEKLY BATCH GENERATION REQUEST

## 📌 CURRENT WEEK TARGET

**Generation Request:** Complete Week [X] file set
- **Week Number:** [X] (1-16, or 4.5, 5.5, 5.5, 13)
- **Duration:** [X] days
- **Total Files:** 11-13 files per week

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## 🎯 DELIVERABLES REQUIRED

### **PART 1: INSTRUCTIONAL FILES (5 files per week)**

Generate the following 5 instructional files for Week [X]:

**File 1:** Week_[X]_Day_1_[Topic_Name]_Instructional.md
- 🤔 Section 1: The Why (900-1500 words)
- 📌 Section 2: The What (900-1500 words)
- ⚙ Section 3: The How (900-1500 words)
- 🎨 Section 4: Visualization (900-1500 words)
- 📊 Section 5: Critical Analysis (600-900 words)
- 🏭 Section 6: Real Systems (500-800 words)
- 🔗 Section 7: Concept Crossovers (400-600 words)
- 📐 Section 8: Mathematical (300-500 words)
- 💡 Section 9: Algorithmic Intuition (500-800 words)
- ❓ Section 10: Knowledge Check (200-300 words)
- 🎯 Section 11: Retention Hook (900-1500 words)
- 🧩 5 Cognitive Lenses
- ⚔ Practice Problems: 8-10 (with sources)
- 🎤 Interview Q&A: 6+ pairs
- ⚠ Common Misconceptions: 3-5
- 🔲 Advanced Concepts: 3-5
- 🔗 External Resources: 3-5
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Word Count Target: 5,500-10,500 words

**File 2:** Week_[X]_Day_2_[Topic_Name]_Instructional.md
[Repeat all requirements above for Day 2 topic]

**File 3:** Week_[X]_Day_3_[Topic_Name]_Instructional.md
[Repeat all requirements above for Day 3 topic]

**File 4:** Week_[X]_Day_4_[Topic_Name]_Instructional.md
[Repeat all requirements above for Day 4 topic]

**File 5:** Week_[X]_Day_5_[Topic_Name]_Instructional.md
[Repeat all requirements above for Day 5 topic]

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### **PART 2: SUPPORT FILES (6+ files per week)**

Generate the following 6+ support files for Week [X]:

**Support File 1:** Week_[X]_Guidelines.md
- 🎯 Learning objectives for the week
- 📚 Key concepts overview
- 🎓 Learning approach & methodology
- 💡 Tips for mastering the week
- 🔗 How topics connect
- 📊 Practice strategy for the week
- ⏱️ Time management guide
- ☑️ Weekly checklist

Target: 1,500-2,000 words

**Support File 2:** Week_[X]_Summary_Key_Concepts.md
- 📌 Quick reference of all topics
- 🎯 Key concepts in bullet format
- 💡 Core ideas (one-liner each)
- 🔗 Concept relationships
- 📊 Visual concept map (ASCII)
- ⚡ Highlights of each day
- 🎓 Learning milestones

Target: 1,000-1,500 words

**Support File 3:** Week_[X]_Interview_QA_Reference.md
- 🎙️ 50+ interview questions for the week
- 💬 Real questions asked in interviews
- 📢 Detailed answers (2-3 paragraphs each)
- 🔀 Follow-up variations
- 🎯 Difficulty level indicators
- 📊 Company-specific questions
- ☑️ Answer checklist points

Target: 2,000-2,500 words
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**Support File 4:** Week_[X]_Problem_Solving_Roadmap.md
- 🗺️ Learning path for the week
- 📈 Progression from simple → complex
- ⚔️ Practice problem recommendations
- 🎯 Problem-solving strategies
- 💡 Common pitfalls to avoid
- ☑️ Milestone achievements
- 🔗 Prerequisites & next week connections

Target: 1,200-1,800 words

**Support File 5:** Week_[X]_Daily_Progress_Checklist.md
- 🗓️ Day-by-day checklist
- ☑️ Daily learning objectives
- 📚 Required readings/topics
- ⚔️ Practice problems to solve
- 🎙️ Interview questions to review
- 💡 Key concepts to master
- ✔️ Completion indicators
- 🏆 Weekly achievement tracker

Target: 800-1,200 words

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## 📋 SPECIFICATIONS & REQUIREMENTS

### **Format Requirements:**
- Format: Markdown (.md)
- Encoding: UTF-8
- Line endings: LF (Unix)
- Header style: # ## ### (proper hierarchy)
- Emphasis: **bold** and *italic* (not __bold__ or _italic_)
- Lists: Use `-` for unordered, `1.` for ordered

### **Emoji Requirements:**
- 🤯 The Why
- 📌 The What
- ⚙️ The How
- 🎨 Visualization
- 📊 Critical Analysis
- 🏭 Real Systems
- 🔗 Concept Crossovers
- 📐 Mathematical
- 💡 Algorithmic Intuition
- ❓ Knowledge Check
- 🎯 Retention Hook

### **🧩 5 Cognitive Lenses:**
- 💻 Computational Lens (RAM, cache, memory, hardware)
- 🧠 Psychological Lens (misconceptions, learning)
- 🔄 Design Trade-off Lens (time vs space, simple vs complex)
- 🤖 AI/ML Analogy Lens (ML connections)
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- 📜 Historical Context Lens (inventor, evolution, adoption)

### **Quality Standards:**
- All 11 sections per instructional file
- All 5 cognitive lenses per topic
- 5,500-10,500 words per instructional file
- 8+ practice problems per topic (with real sources)
- 6+ interview Q&A pairs per topic (with follow-ups)
- 3-5 common misconceptions per topic
- 3-5 advanced concepts per topic
- 3-5 external resources per topic
- 5-10 real system implementations per topic
- Complexity analysis table (Best/Average/Worst)
- Perfect grammar & spelling
- Professional tone throughout
- No code syntax (logic-only explanations)

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## 🎯 DELIVERY REQUIREMENTS

### **File Delivery Method:**
☑ **Generate files ONE BY ONE**
☑ **Each file as separate markdown (.md)**
☑ **Ready for immediate download**

### **Delivery Order (for Week [X]):**

**Instructional Files First:**
1. Generate + Deliver: Week_[X]_Day_1_[Topic]_Instructional.md
   - [Wait for verification]
   - [Ready for download]

2. Generate + Deliver: Week_[X]_Day_2_[Topic]_Instructional.md
   - [Wait for verification]
   - [Ready for download]

3. Generate + Deliver: Week_[X]_Day_3_[Topic]_Instructional.md
   - [Wait for verification]
   - [Ready for download]

4. Generate + Deliver: Week_[X]_Day_4_[Topic]_Instructional.md
   - [Wait for verification]
   - [Ready for download]

5. Generate + Deliver: Week_[X]_Day_5_[Topic]_Instructional.md
   - [Wait for verification]
   - [Ready for download]

**Support Files Second:**
6. Generate + Deliver: Week_[X]_Guidelines.md
7. Generate + Deliver: Week_[X]_Summary_Key_Concepts.md
8. Generate + Deliver: Week_[X]_Interview_QA_Reference.md
9. Generate + Deliver: Week_[X]_Problem_Solving_Roadmap.md
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10. Generate + Deliver: Week_[X]_Daily_Progress_Checklist.md

**Total per week: 11 files**

### **File Format for Delivery:**
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[File Complete]

File: Week_[X]*Day_Y*[Topic_Name]_Instructional.md

Status: ☑ READY FOR DOWNLOAD **Size:** ☑ pages, [Y] words **Sections:** All 11 sections ☑ **Lenses:** All 5 lenses ☑ **Quality:** Verified against standards ☑

[Complete markdown file content here]

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## ☑ VERIFICATION CHECKLIST

For each instructional file, verify:

**Structure (11 sections):**
- [ ] 🤯 The Why (900-1500 words)
- [ ] 📌 The What (900-1500 words)
- [ ] ⚙️ The How (900-1500 words)
- [ ] 🎨 Visualization (900-1500 words, 3+ examples)
- [ ] 📊 Critical Analysis (600-900 words, complexity table)
- [ ] 🏭 Real Systems (500-800 words, 5-10 systems)
- [ ] 🔗 Concept Crossovers (400-600 words)
- [ ] 📐 Mathematical (300-500 words, proof sketch)
- [ ] 💡 Algorithmic Intuition (500-800 words, decision framework)
- [ ] ❓ Knowledge Check (200-300 words, 3-5 questions)
- [ ] 🎯 Retention Hook (900-1500 words, all 5 lenses)

**🧩 5 Cognitive Lenses**
- [ ] 💻 Computational (hardware & memory)
- [ ] 🧠 Psychological (misconceptions & learning)
- [ ] 🔄 Design Trade-off (time vs space)
- [ ] 🤖 AI/ML Analogy (learning connections)
- [ ] 📜 Historical Context (evolution & adoption)

**Supplementary Outcomes:**
- [ ] ⚔️ Practice Problems: 8-10 (with sources)
- [ ] 🎙️ Interview Q&A: 6+ pairs (with follow-ups)
- [ ] ⚠️ Misconceptions: 3-5 (with corrections)
- [ ] 📈 Advanced Concepts: 3-5
- [ ] 🔗 Resources: 3-5 (diverse types)

**Quality Metrics:**
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- [ ] Word count: 5,500-10,500
- [ ] Grammar: Perfect
- [ ] Tone: Professional
- [ ] Real systems: 5-10+
- [ ] Complexity table: Present
- [ ] Emoji headers: All present
- [ ] Examples: 3+ detailed

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## 📌 WEEK SPECIFICATIONS

Replace [X] with actual week number:

| Week | Days | Topics | Special Notes |
|------|------|--------|---------------|
| 1 | 5 | RAM, Big-O, Space, Recursion I, Recursion II | Foundations |
| 2 | 5 | Arrays, Strings, Lists, Stacks, Queues | Linear structures |
| 3 | 5 | Sorting, Hashing, Hash Maps, Sets, Design | Specialization |
| 4 | 5 | 2-Pointers, Sliding (Fixed), Sliding (Var), D&C, Binary Search |
Patterns |
| 4.5 | 5 | Hash Map/Set, Monotonic, Merge, Partition, Kadane/Fast-Slow | Tier 1 |
| 5 | 5 | Binary Trees, Traversals, BST, Heaps/TopK, Balanced Trees | Trees |
| 5.5 | 5 | Difference Array, In-Place, Advanced Strings, [2], [3] | Tier 2 |
| 6 | 5 | Graph Basics, DFS, BFS, Dijkstra, Toposort | Graph 1 |
| 7 | 5 | Advanced Graphs, Backtracking, [4], [5], Integration | Graph 2 |
| 8 | 5 | Segment Trees, Trie, Special DS, [6], [7] | Specialized |
| 9 | 5 | KMP, Rabin-Karp, Number Theory/Bit, Modular/Prob, Geometry | String/Math
|
| 10 | 5 | Greedy, Backtracking Adv, [8], [9], Integration | Greedy/BT |
| 11 | 5 | DP Fundamentals, 1D DP, 2D DP, Advanced DP, DP Opt | DP |
| 12 | 5 | Merge Intervals Adv, Monotonic Adv, Cyclic, Matrix Adv, Review |
Mastery |
| 13 | 6-7 | Fast-Slow Ext, Reverse-2ptr, Matrix Traversal, MatExp, UFAdv,
Encoding | Tier 3 |
| 14 | 5 | [Topics], [Topics], [Topics], [Topics], Integration | Deep Dive 1 |
| 15 | 5 | [Topics], [Topics], [Topics], [Topics], Integration | Deep Dive 2 |
| 16 | 5 | Mock Interview 1, Mock 2, Mock 3, Mock 4, Final Review | Mock/Review |

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## 🚀 READY TO GENERATE?

**Provide this prompt and I will:**

☑ Generate Week [X] Day 1 instructional file (complete)
☑ Deliver as downloadable .md file
☑ Verify all 11 sections + all 5 lenses
☑ Confirm quality standards met
☑ Then generate Week [X] Day 2...
☑ Continue for all 11-13 weekly files
☑ One file at a time, ready to download

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## 📊 WEEKLY GENERATION SCHEDULE

**Week [X] Generation Timeline:**
- Instructional File 1: 10-15 min
- Instructional File 2: 10-15 min
- Instructional File 3: 10-15 min
- Instructional File 4: 10-15 min
- Instructional File 5: 10-15 min
- Support File 1: 8-12 min
- Support File 2: 8-12 min
- Support File 3: 10-15 min
- Support File 4: 8-10 min
- Support File 5: 6-8 min
- Support File 6: 6-8 min

**Total per week: ~90-130 minutes (1.5-2 hours)**

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## 🎯 WHAT YOU'LL RECEIVE

For Week [X], you'll get:

☑ **5 Complete Instructional Files**
- All 11 sections each
- All 5 cognitive lenses each
- 5,500-10,500 words each
- All supplementary outcomes
- Professional-grade quality
- Ready to download as .md

☑ **6+ Complete Support Files**
- Guidelines & overview
- Key concepts reference
- 50+ interview Q&A
- Problem-solving roadmap
- Daily checklist
- File manifest
- Professional quality

☑ **Total: 11-13 Files per Week**
- 30,000-40,000 words
- 600+ pages
- MIT-level quality
- All downloadable as .md
- One file at a time
- Immediate download access

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## 📝 HOW TO USE THIS PROMPT

**For Week 1:**
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Generate all Week 1 instructional and support files. Week number: 1 Days: 5 Topics: RAM Model, Big-O, Space Complexity, Recursion I, Recursion II Total files: 11 (5 instructional + 6 support) Deliver one at a time, as downloadable .md files

```
**For Week 4.5:**
```

Generate all Week 4.5 (Tier 1) instructional and support files. Week number: 4.5 Days: 5 Topics: Hash Maps/Sets, Monotonic Stack, Merge Operations, Partition, Kadane's Algorithm Total files: 11 Deliver one at a time, as downloadable .md files

```
**For Week 13:**
```

Generate all Week 13 (Tier 3) instructional and support files. Week number: 13 Days: 6-7 Topics: Fast & Slow Pointers Extended, Reverse & Two Pointers, Matrix Traversal, etc. Total files: 13 (7 instructional + 6 support) Deliver one at a time, as downloadable .md files

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## ☑ FINAL CHECKLIST

Before requesting a week, verify:

- [ ] Week number identified (1-16, or 4.5, 5.5, 13)
- [ ] Topics identified for that week
- [ ] Days per week known (5 or 6-7 for Week 13)
- [ ] Ready to receive 11-13 files
- [ ] Files will be generated one-by-one
- [ ] All files as downloadable .md
- [ ] Quality standards understood
- [ ] Emoji usage understood
- [ ] 11-section framework confirmed
- [ ] 5-lens requirement confirmed

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**When ready, copy this prompt, fill in [X] with actual week number, and send to AI.**

**AI will generate all weekly files one by one, each as a complete downloadable .md file.**

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*Prompt Version: 8.0*
*Status: ☑ READY TO USE*
*Generated: December 29, 2025, 9:55 PM IST*
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