Plan to practice

# Phase 1: Focusing on Work Applications (Deadline: 18 Sep)

Works Application 🡪 End of August

* First choice because of its clear recruitment process + information I have at hand
* Recruitment are expanding, total income was great
* But I have a sense that this company will have massive lay-off in the future and working here won’t gave me as much credential as Paypal once I’m looking for the new jobs.
* The working hours can be devastating; it will hinder me on pursuing my personal dream.

## From 27/07 to 02/08

|  |  |
| --- | --- |
| Overall | Each day |
| Study all basic search and sort algo:   * Selection rank algorithm * Bucket Sort * Shell Sort * Heapsort   Search thoroughly all possible interview questions of Work Apps:   * Solve all of 13 questions, search for optimize solution, remember their skeleton.   Try out additional review problems in **Cracking the Code Interview 5th Edition**:   * 3 hard (Pay attention on time you used)   Write resume: 2 day in weekend | 27/07 Solve Work Apps ques 1 |
| 28/07 Optimize code of Works Apps ques 1  Look for optimal solution Work Apps ques 1 🡪 study it.  Study Heapsort Algo |
| 29/07 Implement Heapsort Algo/  Do Works App ques 2, 3, 4  Look for Optimal solution of Works Apps ques 2, 3  Study all basic search and sort algo:   * Selection rank algorithm |
| 30/07 Find optimal solution for Works Apps ques 4  Do Works App ques 5, 6  Find optimal solution for Works Apps ques 5, 6  Implement Binary Search. |
| 31/07 Try out additional review problems in **Cracking the Code Interview 5th Edition**: 7  Do Work App ques 7  Find optimal solution for ques 7 |
| 01/08 Write resume.  Refer to “The Google Resume” and follow it strictly. |
| 02/08 Write resume.  Refer to “The Google Resume” and follow it strictly. |

## From 03/08 to 09/08

|  |  |
| --- | --- |
| Overall | Each day |
| Search thoroughly all possible interview questions of Work Apps:   * Solve all of 6 questions left, search for optimize solution, remember their skeleton.   Clean up Cracking the Code Interview 5th Edition (read solution, comparing with my own solution, note down on paper):   * Concepts and Algorithms   + Recursion and Dynamic Programing | 03/08 Do Works App ques 8, 9, 10  Find optimal solution for Works Apps ques 8, 9, 10 |
| 04/08 Finish Works App ques 9,  Do Works App ques 11, 12 |
| 05/08 Find optimal solution for Works App ques 11, 12 |
| 06/08 Have aweful lots of stuffs to do |
| 07/08 Rest |
| 08/08 Rest |
| 09/08 Rest |
|  | 10/08 Rest |

## From 10/08 to 16/08

|  |  |
| --- | --- |
| Overall | Each day |
| Clean up (Probably resolve) Cracking the Code Interview 5th Edition:   * Data Structures - Tree and graph * Concepts and Algorithms   + Recursion and Dynamic Programing. (*1*, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11)   + Sorting and Searching * Read solution of additional Review Problems:   + 18.4, 18.5, 18.6, 18.7 | 11/08 Recursion and Dynamic Programing (2, 3, 4, 5) |
| 12/08 Recursion and Dynamic Programing:   * Review 6, 7, 8 * Try to solve 9 |
| 13/08 |
| 14/08 Solve recursion and Dynamic Programing (10)  Review Sorting and Searching (1, 2, 3, 4, 5) |
| 15/08 Practice exercise from GeeksForGeeks (5, 13) |
| 16/08 Too many works |

## From 17/08 to 23/08

|  |  |
| --- | --- |
| Overall | Each day |
| GeeksForGeeks Exercise:   * Dynamic Programming – 5 sets (set 5, 6, 7, 8, 13)   Clean up (Probably resolve) Cracking the Code Interview 5th Edition:   * Data Structures - Tree and graph * Concepts and Algorithms   + Recursion and Dynamic Programing. (11)   + Sorting and Searching (6, 7, 8) * Read solution of additional Review Problems:   + 18.4, 18.5, 18.6, 18.7 | 17/08 |
| 18/08 GeeksForGeeks Exercise:   * Dynamic Programming – 2 sets (6, 7) |
| 19/08 |
| 20/08 Apply for work app.  Apply for Viki.  Yeah!!! Receive response from Works Apps!!  Response to Works Apps tonight.  Finish Geeks for Geeks set 8 |
| 21/08 Finish Geeks for Geeks (13, 8, 9)  Preparation for Viki:   * Listen to a lecture about scalability (2 hours) |
| 22/08 |

## From 24/08 to 30/08

|  |  |
| --- | --- |
| Overall | Each day |
|  | 24/08 |
| 25/08 |
| 26/08 |
| 27/08 Working on Works Apps Exams |
| 28/08 Working on Works Apps Exams |
| 29/08 Working on Works Apps Exams |
| 30/08 Working on Works Apps Exams |

## From 02/09 until around 18/09

|  |  |
| --- | --- |
| Overall (in priority) | Each day |
| **Note\*\*:**  1. First question will always be on Dynamic Programing, so the primary focus will be on this part.  2. The second problem is usually simple. But it can be anywhere 🡪 just rely on your ability then.  3. Due to time constraint they impose 🡪 always prefer the solution that is **simple and easy to remember**, while performance is acceptable. No point trying to do it in the fastest manner then waste plenty of time and risk  **Task list:**   * 1. Review again all 13 work app questions. 🡪 need to remember their solutions crystal clear.   2. Practice Aptitude test??   3. Geeksforgeeks or Cracking the Code should be the priority??   4. Review entire Recursion and Dynamic Programming in Cracking the Code + Solve recursion and Dynamic Programing (11)   5. Review entire Sorting and Searching in Cracking the Code.   6. Review String in Cracking the Code.   7. Read solution of additional Review Problems: 18.4, 18.5, 18.6, 18.7   8. Try 6 more geekforgeek Dynamic programming (among 30 left so just try your best) | 31/08 Test and debug  Submit application |
| 01/09 |
| 02/09 |
| 03/09 |
| 04/09  Redo Work Apps ques (1, 2, 3) |
| 05/09  Redo Work Apps ques (4, 5, 6) |
| 06/09  Redo Work Apps ques (7, 8, 9, 10, 11, 12, 13) 2 question was excluded |
| 07/09  Redo Cracking the Code (1, 2, 3, 4, 6) |
| 08/09  Redo Cracking the Code (6, 8, 9, 10)  Do GeekforGeek (12) |
| 09/09  Do GeekforGeek (11, 14, 17) |
| 10/09  Get a list of likely to be test problem on Dynamic programming on geekforgeek |
| 11/09 |
| 12/09  Aptitude test practice.  Longest increasing issue  Longest common stuff. |
| 13/09 |
| 14/09 Aptitude test: 3 tests |
| 15/09 Review all 12 solutions of Work Apps  Review LCS, String Permu, knapsack on geeksforgeeks.  All string permu in sorted order. |
| 16/09 Backtracking 🡪 maze navigation |
| 17/09 Browsing through common techniques in Data Structure & Concept and Algorithm of Cracking the Code 🡪 stuff like double pointer, etc. can be priceless. |

# Phase 2: Targeting on others company (after 18/09 presumably)

Focus on learning:

* OOP
* PL/SQL and exercise on complicated query.
* Continue with Thinking in Java.

Ask Paypal when they will open their recruitment for software engineer position:

* Ask Thanh, Trung

Once Work Apps has done their interview 🡪 immediately start on targeting Thoughtworks, Paypal. Need to Searching on Google, CareerCup, GeeksForGeeks for interview questions. *(don’t apply for crap companies, there is small chance they will be better than NCS)*

1. Paypal.
   1. Second choice because of its recent layoff and my lack of knowledge about its interview questions and processes.
   2. But I really like its US culture + reputation, very promising choice to create the base for my US move in the future.
   3. Salary package was better than Work Apps also
2. Thoughtwork 🡪 probably the earliest one:
   1. Lack of knowledge about this company, but it seems to be great 🡪 need more research about its office at Singapore
   2. Salary seems to be equal with Works Apps

Practice interview question:

1. <http://www.geeksforgeeks.org/about/interview-corner/>
   1. Common Interview Question corner
2. Career Cups:
3. Search for interview question from Paypal, Works App and Thoughtwork to practices:
   1. Paypal (get about 10 questions)
   2. Thoughtwork (get about 10 questions)

Thought Works:

Design Patterns, OOP, CI, Software Architecture

Paypal:

* OOPS concepts – Data abstraction, Excapsulation, Virtual Destructors etc.
* Database – SQL Queries and the basics
* Networks – Subnet addressing
* Probability – coupled with Permutation/Combinations
* Analogies

pattern matching, logical thinking, problem solving skills, Java, DBMS and Data Structures

regarding Java, most of the questions were from java.util.Collections Framework