Module Document for Students

Elementary DSA

Hello learners! Welcome to the AccioJob Main Course!

The Elementary DSA module marks your second step towards learning software development skills. This module is designed to introduce you to more programming skills and build your problem-solving & data-interpretation skills. In your previous module, you learned the alphabet of coding language. In this module, you'll learn to form words and gain hands-on problem-solving experience.

Aptitude: The Aptitude curriculum (Quantitative Aptitude, Data Interpretation, Logical Reasoning & Verbal Ability) has been curated by keeping the basic concepts in mind. The first round in almost all companies requires a basic understanding of certain aptitude concepts.

Note: In the Verbal Ability section, the AccioJob portal provides reading material and recorded lectures on various topics, along with assignments for students to complete. It is important to note that there will be a separate contest for VARC, which consists of 30 questions to be answered within 30 minutes. **It is mandatory for students to attempt the VARC Contest in order to pass the current module.**

Who is your instructor?

In the Elementary DSA module, the coding classes will be taken by **Ritik Ramuka.** He graduated from Maharaja Surajmal Institute Of Technology and is currently working as an **SDE at Microsoft.**

Aritra Chatterjee will teach Quantitative Aptitude and Logical Reasoning, an experienced Specialist with a demonstrated history of working in the e-learning industry.

Here's the week-wise topic distribution of the Elementary DSA module:

WEEK 1

Coding: Array List (2D Arrays), Switch Cases

Quantitative Aptitude: Profit and Loss: P & L Problems, Partnership, Discounts, Simple / Compound Interest, Linear Equations

Verbal Ability: Direct & Indirect Speech, Active & Passive, Fill in the blanks, Idioms and phrases,

WEEK 2

Coding: Strings, Sorting
Quantitative Aptitude: Time and work, Pipes and cistern, Time and Distance: Boats and Streams, Trains

Verbal Ability: Sentence Completion, Sentence Ordering, Sentence improvement and construction

WEEK 3

Coding: Recursion, String Builder + Buffer Reader

Data interpretation: Pie Charts, Tables, Caselet, Bar Graphs

WEEK 4

Coding: Recursion

Logical Reasoning: Seating Arrangement: Linear, Circular

Community page:

You'll get information about important events, class timing updates, and contest timings. If you don't want to miss any opportunity & important updates, please join the community as soon as possible.

Assignments:

In every class, you'll be given a set of questions related to topics you studied in that particular lecture. A few questions will be discussed in class, and a few will be for you to practise on your own. Make sure you attempt all your assignments, that is, class and homework questions, on your own so that you can apply all the techniques taught to you and understand them by utilising them first-hand.

Coding & Aptitude Notes:

You'll get coding and aptitude notes on the AccioJob portal itself, as "suggested reading" under every class. You can access these notes anytime, making it easy for them to study and improve their skills.

Gym questions:

Get ready to ace your Module Tests & Company Tests! By tackling extra questions in the gym section, you'll solidify your understanding of every topic. Keep up the good work and always be test-ready by regularly practising gym questions on what you've learned at AccioJob.

Aptitude Class Flow:

In the weekday classes the instructor will focus on teaching the concepts, theory, examples & few questions on each topic in the class. The remaining questions should be attempted as homework questions by the students on their own. And on the weekend the instructor will take a question-solving class.

Important topics

Topics like Strings, Stringbuilder and Recursion will seem hard to grasp at first, but once you practise a good amount of questions on these topics, you'll understand these topics better. Therefore it is very important to do all the assignments, solve enough gym questions and attempt all the contests so that you practise applying these techniques to understand data structures better.

Elementary DSA Mock:

Knowledge of Elementary DSA module concepts is the programming fundamentals. After giving the **Module Test**, you should give a mock of this module and during this module you should give the mock of **Fundamentals of Programming and Aptitude** module; this will help you understand how to give an interview and articulate your solution to problems better.

Weekly Contests:

Weekly contests are crucial for the module because apart from being the tools for students to gauge their level of understanding, they are also great learning tools. In the Elementary DSA module, weekly contests will happen every Saturday before the Module test.

Following this, the contest discussion will happen on Sunday. You should make sure to attempt all the contests and attend the contests discussion to understand different logic to solve the problems.

Test Pattern: There will be 2 Contest's on each weekend:

1. Aptitude: 30 Questions
2. Coding: 3 Questions

In the previous batches, we have seen a direct correlation between the number of contests attempted and final module test performance. Therefore every student must attempt at least one weekly contest throughout the month to move to the next module.

And if you're wondering how we count test attempts, it's simple: if you attempt both Sections of the Weekend Contest (Aptitude and Coding), it's considered as an attempt.

One-on-one mentoring session:

Besides live chat, you can book a one-on-one session with a mentor where you can directly talk to a mentor for 1 hour. The mentorship sessions should be utilised if you feel like you do not understand any fundamental concepts or are struggling with basics like how to approach a problem, what techniques should preferably be used to achieve a particular goal, and how to solve a problem through multiple approaches etc.

Module test:

Every module will have a final test at the end of the module, which will give you a status of your learnings of the month. All the topics of that module can be asked in the module test. So prepare well for the endgame and stay ready to show your coding & aptitude skills!

Module Passing Criteria to get into DSA 2 or Frontend 1

To clear the **Elementary DSA module**, you'll need to score more than 60% of the marks in **your Module test's Coding section** OR **Mock Interview's Coding section.**

Best Strategy for Revision:

Our new revision strategy is designed to help you achieve greater clarity in your understanding of the course material. By recording your revision questions in Google Sheets, you can identify areas of weakness and track your progress more effectively. This will enable you to tailor your revision efforts to target specific areas that need improvement, leading to better performance overall.

How to make your DSA sheet? (Revision Sheet)

DSA Sheet Structure

1. Open the link shared above > Go to File > Make a copy

2. For every new topic make a new sub-sheet (make a duplicate of the Template sub-sheet)

3. Rename the sub-sheet with the name of the topic on which you are practising

4. Fill in all the columns

At the time of revision of any topic fill in the Attempt 2 & Attempt 3 columns

Your best friends….

- **Your instructor**
- **Your batch manager**
- **Student Community Page**
- **Live chat**
- **Live doubt**
- **Mentorship sessions**

DSA Sheet Structure