# **Training Interview Questions**

# **Interview Questions**

## • Company: 99x

- Describe yourself
- About 99x and their technologies
- Explain object-oriented concepts
- Experience with Database/JavaScript
- Details of your projects
- Experience with group projects
- Difficulties faced in group projects
- · How to send a request to a web server?
- · Questions on PHP
- o About university life and teamwork
- Questions about extracurricular activities
- Questions related to problem-solving in real life

## • Company: Atrenta

- Basic data structures, sorting, searching, and optimization
- Some IQ questions
- Questions on C/C++

## • Company: IBM

- Describe yourself
- Focused on checking attitudes and confidence
- Internships only for network and systems side
- Details regarding projects
- Questions regarding their company (ATM network, etc.)
- About academic work
- Extracurricular activities (sports, medals, certificates)

## • Company: IFS

- 15-minute interview with training manager
- Knowledge about the company and reasons for joining
- Proceed to technical topics
- Core concepts (OOP, design patterns, data types)
- · Details on class, object, encapsulation, static methods, and variables
- Java Servlets, platform independence
- o Normal forms in databases, Java threads
- Projects you have done, expect questions on them
- Interest in the latest technology (e.g., Android)

## • Company: IronOne

- Describe yourself
- Aspirations and career goals
- Explain OOP concepts, overloading, overriding
- Details of your projects
- Challenges faced and how you handled them in group projects

## • Company: Metatechno Lanka

- $\circ\,$  General questions about myself and interests
- Asked to write and explain a simple algorithm

## • Company: MillenniumIT

- Describe yourselves
- Explain about virtual memory
- Heap-sort algorithm
- About projects you have done
- About CSS and software engineering concepts

## • Company: Motorola Solutions

- Expectations from the industrial training
- About the company
- · Knowledge about C programming and Java
- Hardware-related stuff (e.g., PIC, FPGA)
- Describe cross compiling
- Confidence to handle an individual project
- Extracurricular activities

## • Company: SimCentric

- Two sections of interviews: technical and general (IQ)
- o Pointers, Data Structures, OOP concepts using examples
- Recursive program (for a given problem)
- Explanation of involvement in projects
- Technical stuff covered in courses and their usage
- Extracurricular activities
- Company: SimCentric (Second Entry)

- Explain yourself
- Check CV and ask about projects
- o Object-Oriented Programming concepts and major concepts
- Types of Polymorphism
- Data structures known
- Differences between array and array-list
- o Differences between vector and array-list
- How to implement a Queue using Stacks
- · Code to reverse an array
- About java collections
- o Differences between C and Java
- Multi-threading
- · Java exception handling
- Finally block
- Multiple inheritance in Java
- Types in thread creation
- Working in a group when the other member isn't performing
- Willingness to learn C++
- Mathematical questions like differentiation
- o Methods used in Stacks and Queues
- · Extracurricular activities

#### • Company: Proavos

- About Computer Networks is HTTP stateful or stateless
- About OOP concepts (Difference between procedural programming and OOP)
- About currently doing projects
- Database (e.g., Normalization)
- What is Test Driven Development (TDD)?
- About a recent project you have done, technologies & techniques used, and time management

## • Company: Proavos (Second Entry)

- Written test questions:
- Describe OOP concepts along with design patterns
- Which one ensures code maintainability? (code refactoring, code reusing, etc.)
- · Write a Java Code to find Palindromes in an Integer array
- Write a Java code to find the maximum adjacent value pair from an ordered list
- Explain user class diagrams, System sequence diagrams, etc.
- Explain database normalization
- $\circ~$  How to increase the performance of a web application
- Differences between mobile applications and web applications
- Java garbage collection
- Java exception handling
- IQ question: Two baskets of 5 litre and 3 litres and infinite water supply. How to measure 4 litres?
- Interview questions:
- Introduction about yourself
- · Questions based on Java OOP
- Questions from the written test
- Software projects done recently
- Database questions (JDBC)
- Why you chose Proavos?
- Hard times in university life?
- Interests and hobbies

## • Company: ShipXpress

- Basic Java with OOP concepts
- Database system
- $\circ~$  IQ and questions from day-to-day life
- o Algorithms and was asked to write a Java code
- HR interview: myself, why you want to join, hobbies
- Technical interview: what is a class, advantages of objects, basic OOP concepts, difference between interface & abstract classes, use of abstract class, MySQL queries & how to connect MySQL from console, Android life cycle, Describe some projects in CV, how to sort 5 strings, how to print 5 strings in an ArrayList (best way), do you like web or mobile, rank your Java knowledge out of 10
- Myself, About company and shipX products
- Technical: Java String, Final keyword, OOP concepts, Basic MySQL queries, Projects in CV (my contribution)

## • Company: Unicorn

- About OOP Concepts (they are using C# language)
- Asked to write and explain a simple algorithm
- · Asked to draw and explain a simple ER diagram
- Asked to write a simple MySQL query
- About database projects
- Some IQ questions (e.g., reverse an array without using another array)
- JAVA projects which we have already done
- Basics Software Engineering (e.g., waterfall method)
- About leaderships (school & university) and awards
- Extracurricular activities

## • Company: Unicorn

- Different between interface and abstract class
- What are the Java collections
- What is JDK and JVM
- o Final, finally, and finalize keyword
- Static keyword
- Example ER diagram
- Ispalindrome pseudo code
- Polymorphism example
- About projects
- MySQL
- About Microsoft SQL Server
- · About company
- o About JS, Angular JS, and other JS types

## • Company: Virtusa

o OOP concepts in Java, Java programming, ER diagrams, and MySQL

## • Company: WSO2

- How to count the unique number of strings from a String Array
- The functional pointer in C
- How to do polymorphism using PHP and explain the projects (RESTFUL PHP Applications)
- They preferred to ask questions about your projects rather than asking the theory
- Difference between MongoDB and relational DBMS?
- How would you implement OOP concept in C?
- String copy in C

## Company: WSO2 (Second Entry)

- Questions about Data Structures
- o Convert a Queue to Stack
- Swapping two numbers
- Find the missing number in a series
- Difference between HTTPS and HTTP
- What is SSL
- About Software Design patterns
- What are the OOP principles

## • Company: WSO2 (Third Entry)

- Brief vourself
- Explain about your GSOC project
- Some questions about the project
- Any questions for him

#### • Company: Codegen

- Brief introduction about yourself
- What are the basic OOP concepts?
- o Difference between abstract class and interface
- What is polymorphism?
- What is normalization in database?
- What is foreign and primary key?
- Example question of student table and department table mapping

## • Company: Codegen (Second Entry)

- Myself (family + school background + about u + current projects + etc..)
- o Problems from the paper u wrote
- OOP concepts
- Explain OOP using an example (e.g., vehicle)
- What are 2 kinds of polymorphism. explain
- How to use threads (2 ways for it)
- 2 types of synchronization
- Data structures
- What is the difference between vector and ArrayList
- Find the mode of a comma-separated value series
- Explain a project you have done
- o Database questions like primary key, foreign key, composite key, unique
- Student register for Courses, what are tables needed, what are primary keys there
- How to get the NICs of Students who haven't registered for any course (write the guery)
- Exception handling, try catch clauses
- o Can we have a try without a catch
- Finally block, Final, finally, finalize explain
- o IQ questions, u have enough water. 5L and 3L bottles. how to measure 4L from it
- What is the capital of America
- About Codegen. why you want to join

# Sysco LABS

- Describe yourself
- Explain a challenging project you worked on
- How do you manage deadlines?
- What do you know about Sysco LABS?

· Using stack perform enque and deque functions.

## IFS Sri Lanka

- Write a code that calculates and prints the average of odd numbers from an array
- Explain the difference between interface and abstract class
- What are design patterns?
- How would you optimize a database query?
- Why are you joining IFS?

## hSenid

- What is polymorphism in OOP?
- Describe a time you worked in a team
- Explain the software development lifecycle

## WSO<sub>2</sub>

- How do you implement a queue using stacks?
- Explain the concept of RESTful services
- Describe a project where you used Java

# **Dialog Axiata**

- What are your strengths and weaknesses?
- How do you handle stress?
- Describe a time you faced a difficult technical problem

## Virtusa

- What are the principles of OOP?
- How do you handle a situation where a team member is not contributing?
- Explain the MVC architecture

## **Creative Software**

- What programming language are you familiar with?
- How to program a Fibonacci sequence in Java?
- Describe one of your best projects
- Can you describe a challenging programming problem you faced in a previous project and how you went about solving it?
- Solve a coding problem, such as reversing a string or finding the shortest path in a graph
- Object-Oriented Programming (OOP): What is encapsulation, inheritance, and polymorphism in OOP? Describe the SOLID principles in software design. Explain the difference between an abstract class and an interface. What is a design pattern, and can you give an example?
- System Design: Design a URL shortening service like Bitly. How would you design a distributed file storage system? Explain the client-server architecture
- CORE JAVA, Spring Boot, and Spring Framework

# **LSEG**

- Technologies you have worked with
- Questions on OOP & OOD fundamentals
- What are the projects that you have done so far?
- Ask about MERN stack and why MERN stack is better
- SQL, Linux, Stock Exchange process
- Logical questions
- Programming literacy
- Write code to check whether the array is symmetric