HSBC Technical Interview Questions

- 1. What is the difference between abstract class and interface?
- 2. What are the new features added in Java version 8?
- 3. HAS-A relationship and IS-A relationship.
- 4. Write a program to establish connection between Java program and database (JDBC).
- 5. What is Diamond Problem in Java?
- 6. Hadoop Architecture.
- 7. What is the process of installing Java?
- 8. What is ResultSet in Java?
- 9. Exception Handling in Java
- 10. Multi-Threading in Java.
- 11. What is static variable in Java?
- 12. How are Java objects stored in memory?
- 13. What is a package in Java? What are various advantages of packages.
- 14. What are the concepts of OOPs that are available in Java?
- 15. Differentiate between the constructors and methods in Java?
- 16. What is Java String Pool?
- 17. What is constructor chaining in Java?
- 18. What is runtime polymorphism or dynamic method dispatch?
- 19. What happens if you remove static modifier from the main method?
- 20. What is "this" keyword in java?
- 21. Which class is the superclass for every class?
- 22. What is "super" keyword in java?
- 23. What is the difference between 'throw' and 'throws' in Java Exception Handling?
- 24. Can we overload main() method?
- 25. Why is Java called the 'Platform Independent Programming Language'?
- 26. Explain JDK, JRE and JVM?
- 27. Explain public static void main(String args[]) in Java
- 28. Why pointers are not used in Java?
- 29. What is Object Oriented Programming? Is Java 100% Object Oriented? Why?
- 30. What is the difference between a local variable and an instance variable?
- 31. Why Java Strings are immutable in nature?
- 32. What is the difference between an array and an array list?
- 33. Can you override a private or static method in Java?
- 34. What is object cloning in Java?
- 35. What is JIT compiler?
- 36. Explain different types of Polymorphism with example.

- 37. What if I write static public void instead of public static void?
- 38. Can you make a constructor final?
- 39. Difference between DDL, DML and DCL in DBMS.
- 40. What is the difference between StringBuffer and String?
- 41. Deadlocks in Operating Systems.
- 42. Basic SQL Queries (Example: Queries to find highest, second highest salary or number of persons in x department having salary more than average of Y department.)
- 43. What are getter and setter class and write one in java?
- 44. Difference between Linux and Ubuntu.
- 45. How will you remove duplicate data from database that do not have a primary key?
- 46. Your server limit is 10000 and the hacker sends in 1000000 bogus requests how will you handle such situation. (DDOS Attack Probable solution is using proxy server and/or firewall)
- 47. Difference between final, finally and finalize keywords.
- 48. The basics of software engineering like DSA, SDLC, GIT, OOPs, and Cloud computing.
- 49. Map and Reduce in Python.
- 50. Composition vs Aggregation vs Association.
- 51. Synchronization in threads
- 52. Call by value, address and reference. Which C supports(value and Address).
- 53. Difference between struct and class.
- 54. Normalisation and normalizing a dataset.
- 55. DBMS concepts and ACID property.
- 56. Inner classes and Virtual functions.
- 57. Abstraction vs Interface
- 58. Difference between JDBC and ODBC.

HSBC Programming Interview Questions

- 1. Reversing a linked list.
- 2. Kth node from the end of a linked list.
- 3. Sort a 2D array row wise.
- 4. Deletion of alternate nodes in a linked list.
- 5. Remove duplicate elements in an array.
- 6. Detection of loop in a linked list.

^{*}Questions from projects with complete description (dataset, result, language, algorithms, implementation) and the latest technologies used in the projects.

- 7. Find unit digit of x raised to power y.
- 8. Minimum element in stack in O(1) time.
- 9. Given two strings s1 and s2. Check if s1 is a rotated version of s2.
- 10. Intersection point of two linked list.
- 11. Check if two strings are anagram or not.
- 12. Number of island problem.
- 13. Partition a set into two subsets such that the difference of subset sums is minimum.
- 14. Minimum time required to rot all oranges.
- 15. Sum of elements of a linked list.
- 16. Print Spiral matrix.
- 17. Given a string, count the number of consonants, vowels and '?','!','*'. The string consists of only lower-case characters.
- 18. Russian Peasant problem.
- 19. Minimum time required to rot all oranges https://www.geeksforgeeks.org/minimum-time-required-so-that-all-oranges-become-rotten/
- 20. Given a 2D matrix containing only 0s and 1s. If a cell contains 1 make that row and column as 1.
- 21. Rat in a Maze problem.

HSBC HR Interview Questions

- 1. Tell me about yourself
- 2. Most difficult situation you have faced in life.
- 3. What is your biggest achievement?
- 4. Why do you want to join HSBC?
- 5. Where do you see yourself in 3/5 years from now?
- 6. What do you know about HSBC?
- 7. What are your strengths and weaknesses?
- 8. What challenges did you face while doing projects?
- 9. Have you worked in teams, what are the challenges you have faced?
- 10. Is a group project better than working alone?
- 11. How will you be an asset to HSBC?
- 12. What do you know about technologies like IOT, cyber security, blockchain, cloud, devops, ML-AI, bigdata, etc?
- 13. How will you deal with an unresponsive teammate?
- 14. What does stress mean to you? What is your take on stress and pressure?
- 15. What changes will you bring to HSBC after joining as its employee?
- 16. How was your internship and what skills did you acquire from it?

- 17. Rate yourself in terms of your integrity and why do you think so?
- 18. What other interviews did you give and why you were not selected in them?
- 19. Are you willing to relocate?
- 20. How will you lead a team? What do you think should be the qualities of a good leader?
- 21. Situation: You are in a team of 5 and 1 of them has a conflicting thought upon a project. What will you do?
- 22. What according to you is failure? Have you ever failed?
- 23. Situation: 10 people say that a person X is annoying and you have to share a room with him. What will you do?
- 24. Tell me an instance where you had to go against your ethics and principles.
- 25. If background is different than CSE (for ex ECE). Why choose software development over ECE?
- 26. If you are given a project with a deadline and you know that you are unable to complete it before that, will you compromise with the quality and stick to a deadline.

What will be your reaction to this situation?