# Wipro - Backend Developer

**Interview Process**

- Online assessment round
- Technical interview round
- HR interview round.

**Interview Questions**

1. What are the differences between an object-oriented programming language and an object-based programming language?
2. What do you understand about the order of precedence and associativity in Java, and how do you use them?
3. How can you make a request for garbage collection in Java?
4. Explain Aggregation vs Composition in Java.
5. What are the differences between error and exception in Java?
6. Differentiate between strings and char arrays in Java.
7. Explain precondition and postcondition to a member function in the context of C++ programming language.
8. What do you understand about Stack Unwinding in C++?
9. Explain free() vs delete () in C++.
10. Explain copy constructor vs assignment operator in C++.
11. Write the code to find the LCM of an array of numbers.
12. Get the nth Fibonacci number in $O(n)$ time and $O(1)$ space complexity.
13. List the important functionalities/features of an operating system.
14. What are the advantages and disadvantages of time slicing in CPU Scheduling in OS?
15. What are the different types of Shells in Linux?
16. What are the advantages and disadvantages of indexing in DBMS?
17. How do the commands DROP, TRUNCATE, and DELETE differ in SQL?
18. What is SQL Profiler?
19. What are the benefits of Hybrid Clouds in Cloud Computing?
20. What is EUCALYPTUS in cloud computing? List some of its functionalities.
21. Explain the Project Management Life Cycle method in the context to Project Management.
22. What do you understand about RAID in the context to Project Management?
23. What makes a block-level element different from an inline element in HTML?
24. Describe the main differences between the LocalStorage and SessionStorage objects in context to HTML.
25. What is the use of a CSS preprocessor? When should a pre-processor be utilised in a project, according to you?
26. How can we make forms in Python?
27. What are the benefits of Python?
28. What are the key features of Python?

29.   What type of language is Python? Programming or Scripting?
30.   What are the applications of Python?
31.   What is the difference between a list and a tuple in Python?
32.   What are the global and local variables in Python?
33.   How can Python be an interpreted language?
34.   What is a boolean in Python?
35.   Define Python Path.
36.   What are the two major loop statements?
37.   How memory management is done in Python?
38.   What are the built-in types available in Python?
39.   Define String in Python.
40.   How do you create a Python function?
41.   How does a function return values?
42.   Write Python code to sort a numerical dataset.
43.   Why do we use the split method in Python?
44.   What are Dict and List comprehensions in Python?
45.   How do we convert the string to lowercase?
46.   Where is the math.py (socket.py, regex.py, etc.) source file?
47.   What are the functionalities of an operating system?
48.   What is the difference between UNIQUE key and PRIMARY key constraints?
49.   Define the SQL Profiler.
50.   What is the stored procedure?
51.   What is a process and what is a thread?
52.   What are the advantages of a thread? What does the multithreading look like?
53.   What are Multi-Processing and Multitasking?
54.   What are the differences between an object-oriented programming language and an object-based programming language?
55.   What are the differences between error and exception in Java?
56.   Differentiate between strings and char arrays in Java.
57.   Explain precondition and postcondition to a member function in the context of C++ programming language.
58.   What do you understand about Stack Unwinding in C++?
59.   Explain free() vs delete () in C++.
60.   What are the Different Objects in DBMS?
61.   Define memory management in C.
62.   What are the steps involved in designing complete software?
63.   What is the difference between Abstract classes and interfaces?
64.   What is the property of a class?
65.   Define precondition and postcondition to a member function.
66.   How can you sort the elements of an array in descending order?
67.   Write a program to sort the string by using bubble sort.
68.   Write code in C to print "hello world" without using a semicolon
69.   Write a program to find the factorial of a number.
70.   Write a C program for the Fibonacci series.

71. What is the logic behind the reverse of a string in Java?
72. Name the operators that cannot be overloaded.
73. What is polymorphism?
74. How is C++ struct different from C++ class?
75. What is DOM?
76. What are the benefits of Hybrid Clouds in Cloud Computing?
77. What is encapsulation? How does it help in building better software?
78. What is meant by dynamic polymorphism?
79. What is meant by Garbage Collection in the OOPs world?
80. What is a singleton pattern? How is it implemented in OOP?
81. What is an abstract class? When should you use it?
82. What is a view in SQL? How is it different from a table?
83. What do you mean by Clustered Index?
84. What is SQL injection? How can it be prevented?
85. What is a semaphore, and how is it used to synchronize processes or threads?
86. What is thrashing in OS?
87. What are starvation and aging in OS?
88. What is a page fault, and how is it handled by an operating system?
89. How does TCP ensure reliable data transmission over a network?
90. What is a router? How does it differ from a switch?
91. How would you create a system to manage huge user traffic volumes?
92. What is your experience with DevOps tools such as Jenkins, Ansible, or Chef?
93. How would you speed up a database query that runs slowly?
94. What virtualization is and what it does?
95. Explain the difference between a synchronous and asynchronous call?
96. Tell me about the idea of containerization and the advantages it offers.
97. What do you understand about Stack Unwinding in C++?
98. What are the data structures used in BFS and DFS algorithms?
99. What do you understand about RAID in Project Management?
100. Why do we need preprocessing for CSS?
101. How may a Java programme request trash collection?
102. Write a program to check palindromes.
103. Write a program to check whether or not the number is prime
104. How do you put the items in an array in order from most to least?
105. Write a program that uses bubble sort to sort the string.
106. Without using a semicolon, write C code to output "Hello, world!"
107. What makes a macro faster than a function in the C programming language?