1.Tell me about yourself.

This is often the first question and is an opportunity to provide a brief overview of your background and experience.

2.What programming languages are you proficient in?

Be prepared to discuss the programming languages you are comfortable with and your level of expertise in each.

3.Can you explain the difference between a variable and a constant?

This tests your fundamental understanding of programming concepts.

4.How do you handle errors or exceptions in your code?

Be ready to discuss error-handling techniques like try-catch blocks.

5.What is object-oriented programming (OOP), and why is it important?

Explain the principles of OOP and its advantages in software development.

6.Have you worked with databases? If so, which ones and how?

Discuss your experience with database management systems and SQL queries.

7.Explain the difference between HTTP and HTTPS.

Showcase your knowledge of web protocols and security.

8.What is version control, and have you used any version control systems?

Describe the concept of version control and mention any tools you're familiar with (e.g., Git).

9.Can you write code to solve a simple problem?

Be prepared to write code on a whiteboard, paper, or using an online coding platform to demonstrate your coding skills.

10.What is the difference between a function and a method?

Explain the distinctions between functions and methods in programming.

11.What is a data structure, and can you name some common data structures?

Discuss the types of data structures you're familiar with (e.g., arrays, linked lists, dictionaries).

12.How do you optimize code for performance?

Talk about strategies for improving code efficiency and optimization techniques.

13.Have you worked on any software development projects or contributed to open-source projects?

Highlight relevant projects and your role in them.

14.Describe a challenging problem you faced in a project and how you solved it.

Share a real-world example that demonstrates problem-solving and critical thinking skills.

15.How do you stay updated with the latest programming trends and technologies?

Discuss your learning process and resources you use to stay current in the field.

16.What is the importance of code documentation and comments?

Explain the significance of documenting code and providing comments for clarity and maintainability.

17.How do you handle working on a team project?

Discuss your teamwork, communication, and collaboration skills.

18.Do you have experience with unit testing and test-driven development (TDD)?

If applicable, talk about your experience with testing methodologies.

19.What is the Agile development methodology, and have you worked in an Agile environment?

Provide an overview of Agile principles and your experience working in Agile teams.

20.Why do you want to work for our company?

Be prepared to discuss why you're interested in the specific role and company you're interviewing with.  
  
 **Answers**:

1.Tell me about yourself.

-Thankyou sir for this opportunity. I have always passions about technology skills and problem solving which led me select this profession in programming. Currently I am doing my under-graduate in Computer Science and Engineering from American International University-Bangladesh where I have made my base strong in technical site. I have the opportunity to establish projects in C++, JAVA, C# programming language. Apart from programming languages, I have developed my skills in Database Management Project by using Oracle 10 and SQL.I am a good communicator and have ability playing a significant role in team tasks.

2.What programming languages are you proficient in?

-C++, JAVA, C#, .Net Framework, Python, SQL.

3.Can you explain the difference between a variable and a constant?

-A constant does not change its value over time. It is used to hold the fixed values which we can retrieve later but cannot change. A variable on the other hand, is used to hold some value that can be changed according to the requirement. It changes its value dependent on the equation. Constants are usually written in numbers.

4.What is the difference between a function and a method?

-A function doesn't need any object and is independent, while the method is a function, which is linked with any object. We can directly call the function with its name, while the method is called by the object's name. Function is used to pass or return the data, while the method operates the data in a class.

5. What is a data structure, and can you name some common data structures?

- A data structure is a specialized format for organizing, processing, retrieving and storing data.

Array, Stack, Queue, Linked list are the common data structures.

6. How do you handle working on a team project?

-First of all, I try to understand the project objectives and goal. As a team member I definitely

contribute my interpersonal skills and communication with team members. I am a good communicator. I can regularly update my progress and ask for feedback if necessary. I always try to have alternative ideas in project making that makes projects flexible.

I can play a vital role as a leader. I have already established Restaurant Management System in JAVA and Hostel Management System in Database as a leader.

7. Why do you want to work for our company?

- I'm excited about the opportunity to work for your company for several reasons. First and foremost, I've done extensive research on your organization, and I'm impressed by your commitment to create a global community of mission-driven individuals capable of addressing humanity’s most significant challenges and realizing its most ambitious dreams. This aligns perfectly with my own values and aspirations.