1. What are primitive data types in programming, and give examples?
2. Explain the difference between int and float data types.
3. What is a string data type, and how is it represented in most programming languages?
4. Describe the concept of data type casting or type conversion.
5. What is a composite data type, and provide examples of such types.
6. How do you define constants in programming, and why are they useful?
7. Explain the difference between the assignment operator (=) and the equality operator (==).
8. What are arithmetic operators, and how do they work in numerical calculations?
9. Describe the logical operators AND, OR, and NOT, and provide examples of their usage.
10. What is operator precedence, and how does it affect the evaluation of expressions?
11. What is an if statement, and how does it work in programming?
12. Explain the switch statement and its advantages over multiple if-else statements.
13. What is short-circuit evaluation in conditional expressions, and when is it useful?
14. Looping Statements:
15. Differentiate between the for loop, while loop, and do-while loop.
16. Explain the concept of loop control statements like break and continue.
17. How can you iterate over elements in an array or collection using loops?
18. Describe the purpose of nested loops and provide an example.
19. What is a function, and why is it important in programming?
20. Explain the difference between a function declaration and a function definition.
21. Describe the concept of recursion in functions and provide an example.
22. What are parameters and return values in functions, and why are they used?
23. How do you pass arguments by value and by reference in functions?