

## Operators and Expressions

1. Write a program that demonstrates the use of arithmetic operators.
2. Create a program that calculates the remainder of two numbers using modulus operator.
3. Write a program to demonstrate the increment and decrement operators.
4. Create a program that shows the precedence of operators by using multiple operators in an expression.
5. Write a program that demonstrates the use of logical operators.
6. Create a program to evaluate a simple arithmetic expression (like  $a + b * c$ ).
7. Write a program to demonstrate the ternary (conditional) operator.
8. Create a program to calculate the area of a circle using  $\pi * r * r$ .
9. Write a program that takes two numbers and performs all arithmetic operations on them.
10. Create a program that converts a temperature from Fahrenheit to Celsius.
11. Write a program to demonstrate the relational operators.
12. Create a program to show the use of assignment operators.
13. Write a program to demonstrate compound assignment operators ( $+=$ ,  $-=$ , etc.).
14. Create a program to check whether two integers are equal using the equality operator.
15. Write a program to demonstrate the logical AND, OR, and NOT operators.
16. Create a program that reads three integers and prints the smallest number.
17. Write a program that demonstrates the bitwise AND operator.
18. Create a program to calculate the compound interest.
19. Write a program to find whether a number is positive or negative using a ternary operator.
20. Create a program that uses the size of operator to print the size of variables.