1. Write a program to declare an int variable, assign a value to it, and print it.
2. Write a program to declare a float variable, assign a value, and print it with two decimal precision.
3. Declare a char variable to store a letter, input it from the user, and print it.
4. Declare a bool variable and assign it true or false, then print its value.
5. Write a program to input two integers and print their sum, difference, product, and quotient.
6. Write a program that takes two floating-point numbers as input and prints their average.
7. Write a program that converts a floating-point number to an integer using typecasting.
8. Write a program to take a character as input and print its ASCII value.
9. Write a program to input a number and print whether it is even or odd.
10. Write a program to input two characters and check if they are the same or different.
11. Input an integer and a float, then print their sum as both integer and float.
12. Declare an integer array of size 5, input values from the user, and print them.
13. Write a program that takes a string from the user and prints each character on a new line.
14. Declare a string variable, initialize it with a sentence, and print its length.
15. Write a program to convert a lowercase character to uppercase using typecasting.
16. Write a program to convert an uppercase character to lowercase using typecasting.
17. Input two integers and swap their values using a temporary variable.
18. Input two integers and swap their values without using a temporary variable.
19. Write a program to check if a character is a vowel or a consonant.
20. Write a program that inputs an integer and a character, then prints them both.
21. Write a program to calculate the area of a rectangle using float or double.
22. Write a program to declare and initialize multiple variables of different types and print them.
23. Input a float number and print its integer part and fractional part separately.
24. Write a program that inputs two numbers and prints their remainder (modulus).
25. Write a program to compare two float values using == and != operators.
26. Write a program to input a string and print it in reverse order.
27. Input a number and print its square and cube.
28. Write a program that inputs a boolean value and prints its opposite using the ! operator.
29. Write a program to input three integers and print the largest among them.
30. Write a program to input an integer and print its binary representation.
31. Declare an integer constant using the const keyword and try to modify its value (observe the result).
32. Write a program to declare a double variable, initialize it, and print its size using sizeof.
33. Declare an integer array of size 10, initialize it with values, and print the sum of all elements.
34. Write a program to declare a character array, input a string, and convert all characters to uppercase.
35. Input a string and print the number of vowels and consonants in it.
36. Write a program to declare a multi-dimensional array and print the elements in matrix form.
37. Input an integer and print its absolute value using the abs() function.
38. Declare an integer pointer, input a number, and store its address using the pointer.
39. Write a program to input a float number and round it off to the nearest integer.
40. Write a program to calculate the compound interest using double for the interest rate.
41. Write a program to input a hexadecimal number and print its equivalent decimal value.
42. Declare a character array, initialize it with a string, and print the ASCII value of each character.
43. Write a program to input a number and print the number of digits in it.
44. Declare a string, input a word, and print whether it is a palindrome or not.
45. Write a program to input a number and print whether it is positive, negative, or zero.
46. Input two float numbers and print the larger number using conditional operator (ternary).
47. Write a program to input an integer and check if it is divisible by 5 and 10.
48. Input an integer, float, and char, then print them in a formatted table.
49. Declare a 2D array of size 3x3, input values, and print the sum of all diagonal elements.
50. Input a floating-point number and print it in scientific notation format.

**Tips for Solving These Problems:**

* **Understand each data type**: Try to use appropriate data types like int, float, double, char, and bool where they fit best.
* **Experiment with input/output**: Use std::cin and std::cout effectively for taking input and printing output.
* **Practice typecasting**: Try converting between different data types to understand how they work in memory.
* **Use sizeof**: To check the size of data types in bytes, which helps in understanding how data is stored.
* **Edge Cases**: Always think of edge cases like division by zero, large values, etc., and handle them appropriately.

These exercises will give you a solid understanding of working with data types in C++. Let me know if you'd like help with any of these problems!