



ALGORITHM AND PSEUDOCODE



An algorithm is a well-defined, step-by-step procedure or set of rules designed to perform a specific task or solve a particular problem.

Algorithms are used in various fields of computer science, mathematics, and everyday life to automate processes, make decisions, or generate desired outcomes.



Pseudocode is a **high-level, informal description of a computer program** or algorithm that uses human-readable language and simple, structured notation to outline the steps or logic of a program without getting into the specifics of a particular programming language.

Pseudocode is especially useful for **sketching out the structure of complex algorithms**, making it an essential tool in the software development process.



Adding two numbers is a simple operation that can be performed with a basic algorithm

1. Start
2. Input the first number (num1)
3. Input the second number (num2)
4. Add num1 and num2 to get the result ($\text{sum} = \text{num1} + \text{num2}$)
5. Display the result (sum)
6. End



Begin.

WRITE “Please enter two numbers to add”

READ num1.

READ num2.

Sum = num1+num2.

WRITE Sum.

End.



```
int main() {  
    // Declare variables to store the numbers  
    int num1, num2;  
  
    // Prompt the user to enter the first number  
    printf("Enter the first number: ");  
    scanf("%d", &num1);  
  
    // Prompt the user to enter the second  
number  
    printf("Enter the second number: ");  
    scanf("%d", &num2);  
}
```



```
// Calculate the sum
int sum = num1 + num2;

// Display the result
printf("Sum: %d\n", sum);

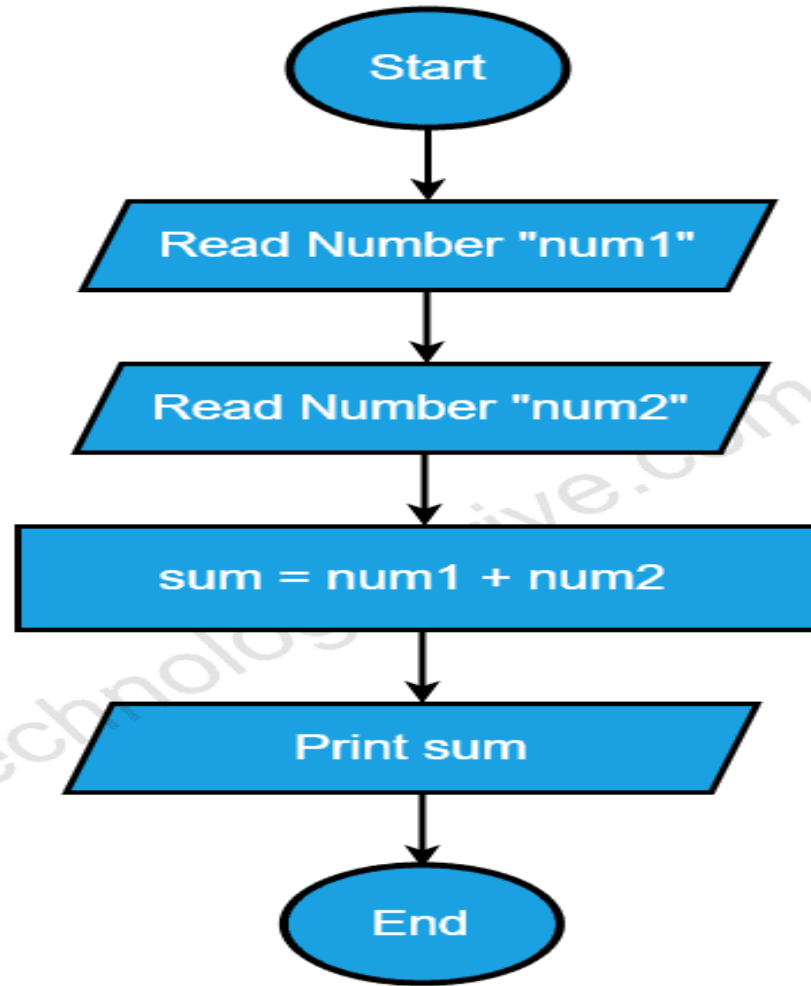
return 0;
}
```

This program first declares two integer variables, num1 and num2, to store the user's input. It then uses printf and scanf to prompt the user to enter two numbers. After reading the input, it calculates the sum of the two numbers and stores it in the sum variable. Finally, it displays the result using printf.



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Flowchart - Sum of Two Numbers



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