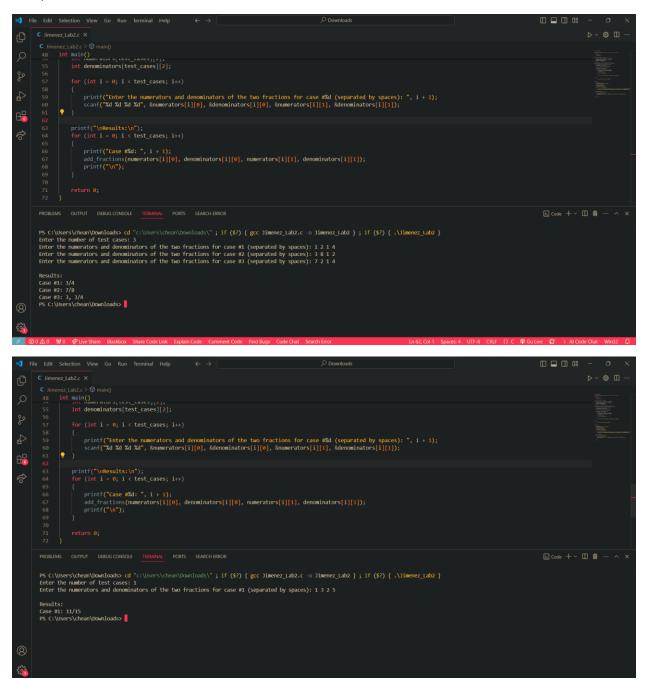
Sample Screenshots:



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Source Code:
#include <stdio.h>
// Function to calculate the greatest common divisor (GCD) of two numbers
int gcd(int a, int b)
 if (b == 0)
   return a;
 return gcd(b, a % b);
}
// Function to simplify a fraction
void simplify_fraction(int *numerator, int *denominator)
{
 int common_divisor = gcd(*numerator, *denominator);
 *numerator /= common_divisor;
 *denominator /= common_divisor;
}
// Function to add two fractions and display the result
void add_fractions(int num1, int denom1, int num2, int denom2)
{
 int result_num = num1 * denom2 + num2 * denom1;
 int result_denom = denom1 * denom2;
 simplify_fraction(&result_num, &result_denom);
 // Display the result in proper format
 if (result_num >= result_denom)
 {
```

```
int whole_part = result_num / result_denom;
   int fractional_part = result_num % result_denom;
   if (fractional_part == 0)
   {
     printf("%d", whole_part);
   }
   else
   {
     printf("%d, %d/%d", whole_part, fractional_part, result_denom);
   }
 }
 else
 {
   printf("%d/%d", result_num, result_denom);
 }
}
int main()
{
 int test_cases;
 printf("Enter the number of test cases: ");
 scanf("%d", &test_cases);
 int numerators[test_cases][2];
 int denominators[test_cases][2];
 for (int i = 0; i < test_cases; i++)
 {
```

```
printf("Enter the numerators and denominators of the two fractions for case #%d (separated by spaces): ", i + 1);
    scanf("%d %d %d %d", &numerators[i][0], &denominators[i][0], &numerators[i][1],
&denominators[i][1]);
}

printf("\nResults:\n");
for (int i = 0; i < test_cases; i++)
{
    printf("Case #%d: ", i + 1);
    add_fractions(numerators[i][0], denominators[i][0], numerators[i][1], denominators[i][1]);
    printf("\n");
}

return 0;
}</pre>
```