

1. Write a program where you will take the two sides of a rectangle and calculate the area and perimeter of the rectangle.
2. Take an array values as input and find the smallest and largest number in the array and print them.
3. Write a program in C that takes minutes as input, and display the total number of hours and minutes.
Example:
Input minutes: 546
Output: 9 Hours, 6 Minutes
4. Write a program that converts a decimal number to binary.
5. Write a program in C to display the n terms of harmonic series and their sum.
 $1 + 1/2 + 1/3 + 1/4 + 1/5 \dots 1/n$ terms
Example:
Input the number of terms: 5
Expected Output:
 $1/1 + 1/2 + 1/3 + 1/4 + 1/5$
Sum of Series up to 5 terms: 2.283334
6. Find the sum of $5+10+15+20+\dots+100$ without using any loops.
7. Write a C program to find the number of integers within the range of two specified numbers and that are divisible by another number.
Example: for $x=5$, $y=20$ and $z = 3$, find the number of integers within the range x and y (inclusive) and that are divisible by z i.e. $\{i : x \leq i \leq y, i \bmod z = 0\}$. The result in this case will be 5.
8. Write a C program to move all 0's to the end of an array. Maintain the relative order of the other (non-zero) array elements.
Example: for the array $[1,4,11,0,7,0,2]$ the output new array will be $[1,4,11,7,2,0,0]$.