

# Lab 6 Assignment

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## 1 Test Cases :

### 1.1 case 1:

- output:

```
Enter two numbers:
-10
15
A: -10    B: 15
Sum: 5
```

### 1.2 case 2:

- output:

```
Enter two numbers:
20
30
A: 20    B: 30
Sum: 50
```

## 2 Explanation:

- This C program calculates the sum of two integers using multithreading with the POSIX pthread library.
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- sum is a global variable to store the result of the addition.
- Takes two integers passed as an array, calculates their sum, and exits, returning the result via pthread-exit().
- Reads two integers from the user and stores them in num[].
- Creates a new thread (pthread-create) to calculate the sum in func-sum.
- Uses pthread-join to wait for the thread to finish and retrieve the result (sum)
- By using a thread, the calculation is offloaded to a separate execution flow, demonstrating basic pthread usage.