Computer Organization and Architecture Lab Project

Problem Description:

Complete the assembly language program, shown in `Fig 1` below. It finds the sum of prime numbers between two numbers stored in memory location at address `num` and copies the sum at memory location with address `sum`. (The program can be tested with different numbers at address `num`.)

Program Code:

```
[ORG 0x100]
        jmp     start

num:    dw      10, 20
sum:    dw      0


start:




















end:    mov     ax, 0x4c00   ;terminate program
        int     0x21
```

Fig 1

Submission Guidelines:

- This is group assignment. Each group will consist of 3-4 students and will submit a single solution.
- Each group will submit a project report and the assembly code for the project.
- The project report will include a cover page with the names and IDs of the students in the group, design steps, and test results for different scenarios.
- Each group will demonstrate the project and submit a project report in hard copy in the lab in Week 11.
- No Late Submissions will be entertained.
- **Copied Assignments will be marked Zero.**