

# Department of Computer Science and Engineering Indian Institute of Technology, Kharagpur

**Compiler Laboratory: CS39003**  
3rd year CSE, 5th Semester

*Assignment - 1: Annotating Assembly*

*Marks: 50*

Assign Date: August 04, 2023

Submit Date: 23:55, August 13, 2023

1. Translate the following C program using GCC/Linux to the assembly language program of x86-64 (Intel 64-bit processor) without optimization.

```
cc -Wall -S code.c
```

2. Rename the generated assembly file as *ass1\_roll.s* (where *roll* is your roll number). Add comments for each of the assembly language instruction. Your comment should explain the functionality of the instruction and the connection to the original C program. Please make sure that your commented file can be compiled to generate executable file. Upload your file (*ass1\_roll.s*) in Moodle server.

**Note:** *Comments without connection to C program will get partial marks.*