SUBJECT: MICROPROCESSOR LAB (MPL)	
NAME:	
CLASS: SE COMP	**ROLL NO.:**
SEMESTER: SEM-II	**YEAR: 2023-24**
DATE OF PERFORMANCE:	**DATE OF SUBMISSION:**
EXAMINED: Prof. G. B. Aochar	

Assignment No-07

Title:- Non-Overlapped block data transfer.

Assignment Name: - Write X86/64 ALP to perform non-overlapped block transfer without string specific instructions Block containing data can be defined in the data segment.

Objective-

- To study various instruction related to

  a) Arithmetic operations.

  b) Data transfer operations.

  c) Branch operations.

  d) String operations.

- To understand how to define block in data segment.

Outcome-

- Students will be able to write code for block data transfer.

- Students will be able to understand different assembly language instruction.

Prerequisite -

System call of Unix for Assembly language Program.

Hardware Requirement-

Desktop PC

Software Requirement-

Ubuntu 14.04,

Assembler: NASM
version 2.10.07
Linker: ld

Introduction:-

Algorithm:

Non-Overlapped Block Data Transfer

1. Initialize Data section.
2. Define 2 arrays (5 members) for source and destination with different memory locations.
3. Initialize destination array with all zeros.
4. Take count N=5
5. Move the first element of source array to destination array.
6. Decrement count N.
7. Repeat step 5,6 till count N=0
8. Display both source and destination arrays.

Conclusion:- Hence we implemented an ALP to Non-overlapped block data transfer.

Questions:-

1. Explain Assembler directives

2. Explain E-Flag register