Ahsanullah University of Science &Technology

Department of Electrical and Electronic Engineering

ASSIGNMENT

Course No: CSE 4293

Course Name: Computer Architecture

Submitted By

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ID   :180205041

Section   :A

Year   :4th

Semester   :2nd

My student ID is **180205041**. so my allocated group is Group-L .

So the instructions of this group are given:

00 IN B

01 INC B

02 MOV C,B
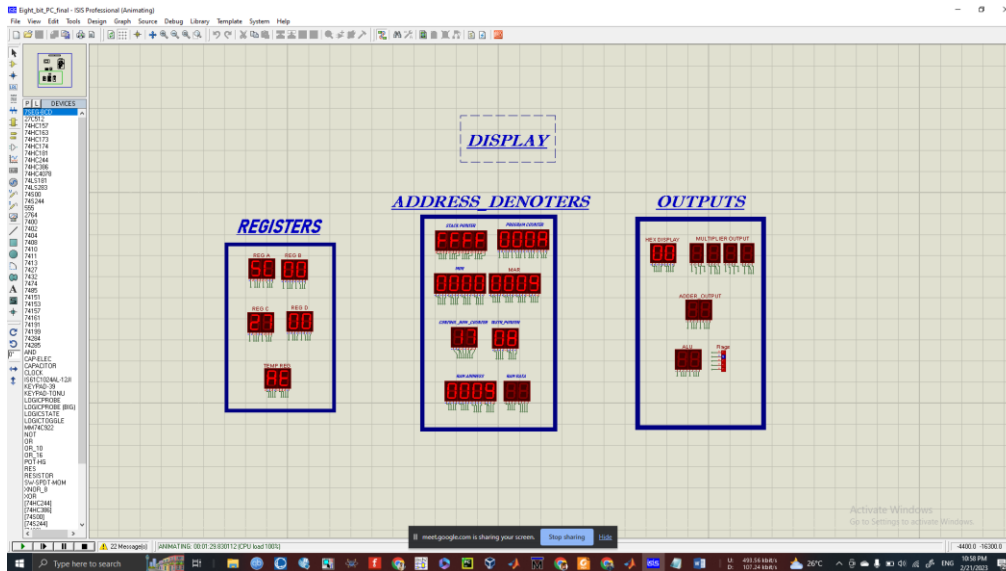
03 MOV A,AE

04 XOR A,D

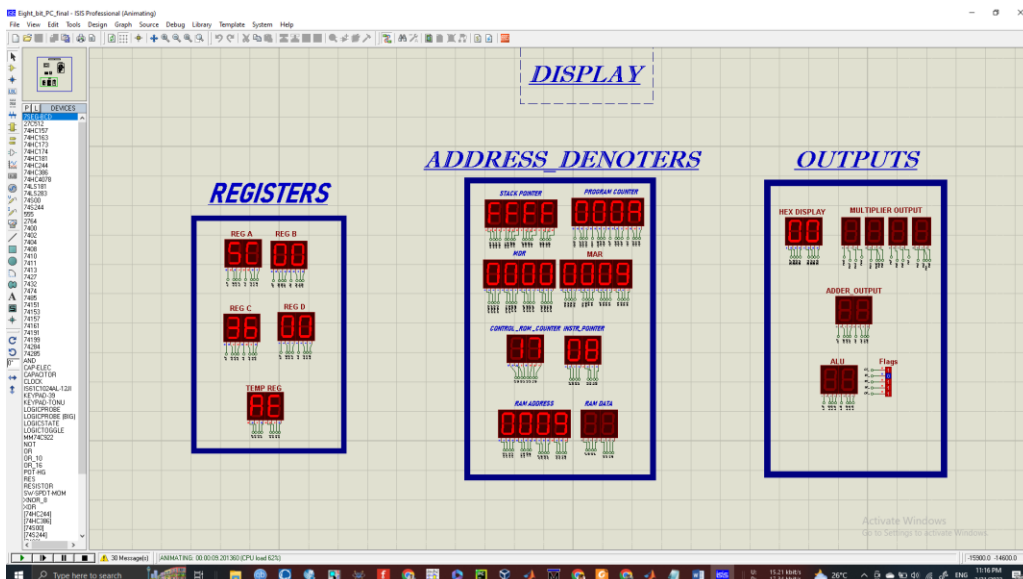05 MOV B,D

06 RCL A

07 OUT B

08 HLT

Simulation:

For first simulation, 26 input is taken from the keyboard:

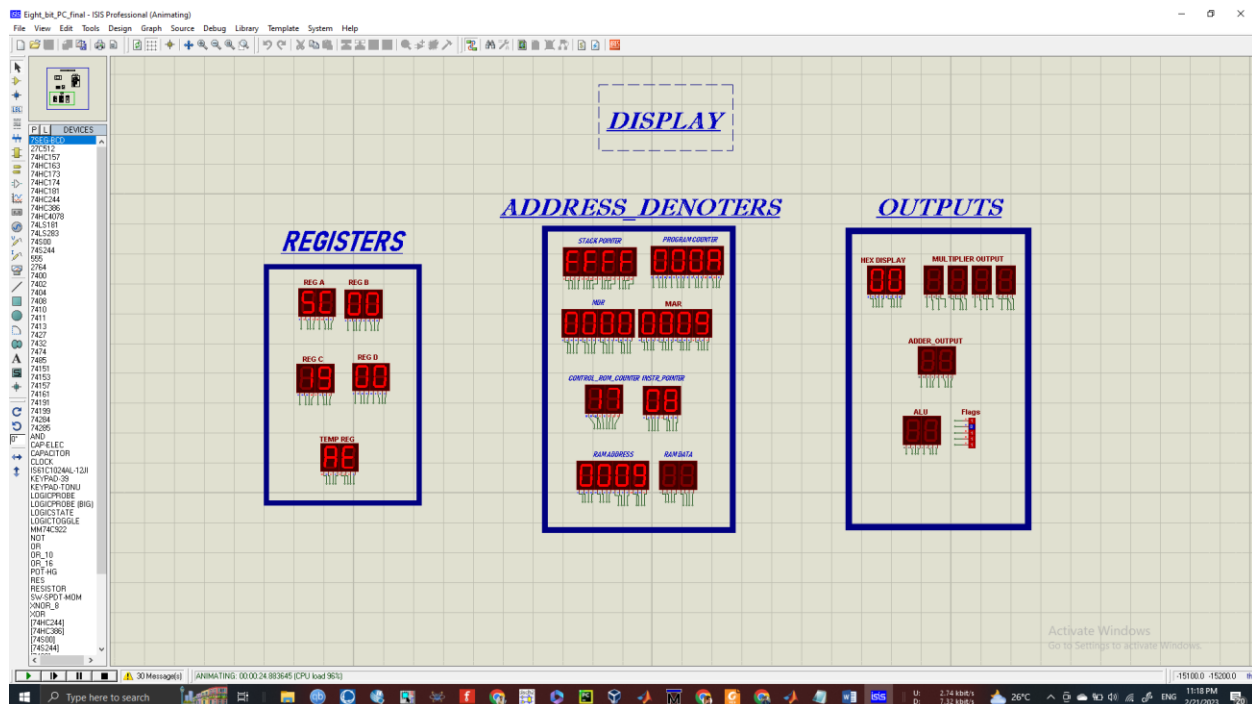| Instruction	Register A	Register B	Register C	Register D	Out
IN B	00	26	00	00	00
INC B	00	27	00	00	00
MOV C,B	00	27	27	00	00
MOV A,AE	AE	27	27	00	00
XOR A,D	AE	27	27	00	00
MOV B,D	AE	00	27	00	00
RCL A	5C	00	27	00	00
OUT B	5C	00	27	00	00
HLT	5C	00	27	00	00

For Second simulation, 35 input is taken from the keyboard:

Instruction	Register A	Register B	Register C	Register D	Out
IN B	00	35	00	00	00
INC B	00	36	00	00	00
MOV C,B	00	36	36	00	00
MOV A,AE	AE	36	36	00	00
XOR A,D	AE	36	36	00	00
MOV B,D	AE	00	36	00	00
RCL A	5C	00	36	00	00
OUT B	5C	00	36	00	00
HLT	5C	00	36	00	00

For Third simulation, 18 input is taken from the keyboard:

Instruction	Register A	Register B	Register C	Register D	Out
IN B	00	18	00	00	00
INC B	00	19	00	00	00
MOV C,B	00	19	19	00	00
MOV A,AE	AE	19	19	00	00
XOR A,D	AE	19	19	00	00
MOV B,D	AE	00	19	00	00
RCL A	5C	00	19	00	00
OUT B	5C	00	19	00	00
HLT	5C	00	19	00	00

For fourth simulation, 83 input is taken from the keyboard:

Instruction	Register A	Register B	Register C	Register D	Out
IN B	00	83	00	00	00
INC B	00	84	00	00	00
MOV C,B	00	84	84	00	00
MOV A,AE	AE	84	84	00	00
XOR A,D	AE	84	84	00	00
MOV B,D	AE	00	84	00	00
RCL A	5C	00	84	00	00
OUT B	5C	00	84	00	00
HLT	5C	00	84	00	00