**class : COMMON FOR IV ECE, EEE, III CSE B.Tech.**

**Subject : Microprocessor Lab**

**List of Experiments**

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| --- | --- |
| **Sl.No.** | **Name of the Experiment** |

1. **SUMMATION & BLOCK TRANSFER OF DATA**

a) Write and execute 8086 to add the given series of BCD numbers and show the result.

b) Write and execute 8086 ALP to transfer a Block of data from one memory area to another memory area.

1. **MULTIPLICATION & DIVISION**
   1. Write and execute 8086 ALP to perform the following multiplications.
      1. Repeated addition
      2. Using SHIFT and ADD instruction
   2. Write and execute 8086 ALP to perform the following.
      1. Binary division
      2. BCD division
2. **SEARCHING & SORTING DATA**
   1. Write and execute 8086 ALP to find the minimum and maximum number from a given data array
   2. Write and execute 8086 ALP to arrange the given data array in ascending order or descending order
3. **EVALUATION OF MATHEMATICAL EXPRESSION**

Mathematical Expressions

1. a\*b- c/d + e

n

1. ∑ xi  yi

i=1

C) Write and execute 8086 Alp to compute the following Evaluation of Multification Of Series

1. **CODE CONVERSION**
   1. Write and execute 8086 ALP to convert HEX to BCD number
   2. Write and execute 8086 ALP to convert BCD to HEX number
   3. Write and execute 8086 ALP to convert HEX to ASCII number
   4. Write and execute 8086 ALP to convert ASCII to HEX number
2. **LOGIC CONTROLLER MODULE**

Write and execute 8086 ALP to design the logical expression using Logic controller interface module

1. **STEPPER MOTOR MODULE**

Write and execute 8086 ALP to rotate a stepper motor either in clockwise direction or in anticlockwise direction and to control the speed of rotation

1. **SERIAL INPUT DISPLAY UNIT MODULE(SIDU)**

Write and execute 8086 ALP to display the desired word in a display of serial input display unit interface module

1. **PARALLEL INPUT DISPLAY UNIT MODULE (PIDU)**

Write and execute 8086 Alp to design an up and down counter using PIDU Interface module

1. **DIGITAL TO ANALOG CONVERTER INTERFACE MODULE**

Write and execute 8086 Alp to generate given waveform through CRO using DAC interface module