

WEEK 1	<b>Getting Started</b> Study of Section 1 and 2 of the DIGIAC 2000 Microprocessor Training System Curriculum Manual. Implementation of programs given in Exercise 1 and 2 pages 34, 40.
WEEK 2	<b>Reading from the Keypad, writing to the Display using PAT Monitor calls.</b> Implementation of a program which will read the keypad to input a 3 digit hexadecimal number, translate it into decimal and display the two numbers, the hexadecimal aligned right, the decimal aligned left
WEEK 3	<b>I/O Port Programming</b> Implementation on Port 2 of the Digiact 2000 a 1Hz binary counter controlled by the proximity detector
WEEK 4	<b>DIGIAC 2000 Application Module Usage</b> Implementation of a piezo-sounder alarm system using proximity detector as input
WEEK 5	<b>Analog-to-Digital/Digital-to Analog Conversion</b> Practical Assignment 19, Page 172 of the DIGIAC 2000 Curriculum Manual
WEEK 6	<b>Motor Speed Measurement</b> Practical Assignment 19, Page 172 of the DIGIAC 2000 Curriculum Manual
WEEK 7	<b>ORGAN</b> Implementation of an Organ using the piezo-sounder and the keypad. Keys representing only the hexadecimal values from 1 to F should be used. The following relationship between the keys and notes should be considered: 1-> 146Hz    2->164Hz    3->174Hz    4->196 Hz 5-> 220Hz    6->246Hz    7->267Hz    8->293 Hz 9-> 326Hz    A->349Hz    B->392Hz    C->440Hz D->493Hz    E->523Hz    F->597Hz
WEEK 8	<b>Interrupts, motor speed measurement using the 8259 PICU</b> Practical Assignment 27, Page 216 of the DIGIAC 2000 Curriculum Manual
WEEK 9	<b>Timer Programming, motor speed measurement using the 8256 MUART Timers</b> Practical Assignment 29, Page 235 of the DIGIAC 2000 Curriculum Manual
WEEK 10	

**Students Are Asked :**

- To do all the necessary preparations for the experiments before coming to the Lab.
- To procure a complete Intel 8256 MUART's hardware Reference Manual