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**;Roll No: 203537 (Serial no 36)**

**Panel: lV**

**;Aim-** **Write an 8051 ALP for rate generation using Timer by using a. Polling method b. ISR method**

**INTERRUPT METHOD**

MOV 8B,#1AH ;Load Timer(Lower byte)

MOV 8D,#FFH ;Load Timer(Higher byte)

MOV 89,#10H ;Select Timer 1 Mode 1

SETB AF ;Enable all interrupts

SETB AB ;Enable Timer 1 Control Bit

SETB 8E ;Start Timer

SJMP FE ;Small Jump

PRESS ESC -> C

PRESS A -> 2029

PRESS ENTER

2029 LJMP 6000 ;Long Jump to 6000

PRESS ESC -> C

PRESS A-> 6000

PRESS ENTER

AT ADDRESS 6000 START WRITING THE CODE

CLR 8E ;Stop Timer

CPL 90 ;Complement Port 1

MOV 8B,#1A ;Load Timer

MOV 8D,#FF ;Load Timer

SETB 8E ;Enable Timer1

RETI

**POLLING METHOD**

PRESS E

PRESS ENTER -> C

PRESS A

PRESS 4000

AT ADDRESS 4000

MOV 89H,#10H ;Select Timer 1 Mode 1

MOV 8D,#FFH

MOV 8B,#1AH

SETB 8EH ;Start Timer

JNB 8FH,FDH

CLR 8EH ;Stop Timer 1

CLR 8FH ;TF1->TCON

CPL 90H ;Complement Port 1

SJMP EDH ;Small Jump of EDH

RET

**Execution Steps:**

1)Press E->'Expand'->Press Enter

2)c=A->Press Enter->'Addz'->default addr 4000

3)Type Your code

4)Press enter key(2 times)

5)Press Q->Press enter->'Command'

6)To run code->Press G

7)It displays 'GOTO?'->Press enter->Display “WAIT”

**Microprocessors used:**

8255->Programmable Peripheral Interface

8253->Timer

8251->USART

74245->Bus transreceiver

62256->SRAM

6224->Power Controller

74374->8 bit flip flop

74373->8 bit latch

2051->Slave Mocroprocessor

6264->8k SRAM

7404->not gate

74427->Small Power management

16V8PAL->Data erasing using UV light

44803->Epirom

8086->Master microprocessor

7414->Inverter