

SHOAIB AKHTAR

20P-0147

3B

LAB-REPORT 13 & 14

CONTENT COVERED: Performed the practical on hardware(7-Segment display)

```
.INCLUDE"M328pDEF.INC"
```

```
.ORG 0
```

```
LDI R16, HIGH (RAMEND)
```

```
OUT SPH, R16
```

```
LDI R16, LOW (RAMEND)
```

```
OUT SPL, R16
```

```
LDI R19, 0xFF
```

```
OUT DDRB,R19
```

```
START:
```

```
LDI R20, 0x55
```

```
OUT PORTB,R20
```

```
RCALL DELAY
```

```
LDI R21, 0xAA
```

```
OUT PORTB,R21
```

```
RCALL DELAY
```

JMP START

DELAY:

```
        LDI R16, 0xFF
AGAIN3: LDI R17, 0xFF
AGAIN2: LDI R18, 0x5
AGAIN1: DEC R18
        BRNE AGAIN1
        DEC R17
        BRNE AGAIN2
        DEC R16
        BRNE AGAIN3
        RET
```

This was the code that we did in the previous LAB and in this lab we did this code to the machine(7-segment display)

Firstly we burned that chip. It means that the code we did in the computer now it will work on this machine...and it was working fine....

CONCLUSION: It was very nice experience. I was always thinking about that how can we code a machine...so by doing this I gained a lot....THANK YOU SIR!!! For arranging the LAB. :)