## experiment2

## For 62256 memory chips

$$\begin{aligned} & \text{Addr19} = 0 \\ & \text{Addr18} \sim 16 = 000 \sim 111 \ (Y_0 \sim Y_7) \\ & \text{Addr15} \sim 0 = 0000 \text{H} \sim 1111 \text{H} \end{aligned}$$

Memory Chip	Address range
$Y_0$	$00000\mathrm{h}\sim0\mathrm{FFFFh}$
$Y_1$	$10000 ext{h} \sim 1 ext{FFFFh}$
$Y_2$	$20000 ext{h}\sim 2 ext{FFFFh}$
$Y_3$	$30000 ext{h}\sim3 ext{FFFFh}$
$Y_4$	$40000 ext{h} \sim 4 ext{FFFFh}$
$Y_5$	$50000 ext{h}\sim 5 ext{FFFFh}$
$Y_6$	$60000 ext{h}\sim 6 ext{FFFFh}$
$Y_7$	$70000 ext{h} \sim 7 ext{FFFFh}$

If the address range of U10 and U11 starts from 80000h, we need to modify Addr19 to 1 and use  $Y_0$ .

## For four registers of 8255 chip

$$Addr7 = 1$$

Addr6 = 0

Addr5  $\sim 3 = 000 \sim 111 \ (Y_0 \sim Y_7)$ 

 $\mathrm{Addr2} \sim 0 = 000 \sim 111$ 

Since 8255 is  $Y_2$ , its address range is 90H~97H.

Register	$A_0$	$A_1$	$\operatorname{Addr}\left(D_0 \sim D_7\right)$	${\rm Addr}(D_8\sim D_{15})$
PortA	0	0	90H	91H
PortB	0	1	92H	93H
PortC	1	0	94H	95H
CtrlPT	1	1	96H	97H

## For PA, PB and PC ports

Register	Usage	
${ m PA}_0 \sim { m PA}_3$	control which digit to display	
${ m PA}_4 \sim { m PA}_7$	control four LED lights	
${ m PB}_0 \sim { m PB}_7$	control which number to display	
$ ext{PC}_0 \sim  ext{PC}_7$	correspond to switches	