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classmate  
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Program to demo the elevator interface

```
→ #include <stdio.h>
#include <reg51.h>
unsigned char xdata commandword - at 0x8000
unsigned char xdata portA - at 0x8003
unsigned char xdata portB - at 0x8005
unsigned char xdata present floors, requested
floors; step = 0xfo;
unsigned long data count; i;
Delay();
{
for (count = 0; count <= 4500; count++)
{
Reset();
{
step = step & 0x0f;
portA = step;
step = step | 0xf0;
portA = step;
}
Group();
{
switch (Requested Floors)
{
case 0x0d: while (step < 0xf3)
{
step++;
portA = step;
Delay();
}
```

```

Reset();
break;
case 0x0b: while (step < 0xf6)
{
    step++;
    Post A = step;
    Delay();
}
Reset();
break;
case 0x07: while (step < 0xf9)
{
    step++;
    Post A = step;
    Delay();
}
reset();
break;
}
}
GoDown()
{
    Switch(Requested Floor)
    {
        case 0x0d: while (step > 0xf3)
        {
            step--;
            Post A = step;
            Delay();
        }
    }
}

```



```

Reset();
break;
Case 0x0b: while (Step > 0x06)
{
    Step--;
    Port A = Step;
    Delay();
}
Reset();
break;
Case 0x0c: while (Step > 0x06)
{
    Step--;
    Port A = Step;
    Delay();
}
Reset();
break;
}
}

```

```

}
void main()
{

```

```

    CommandWord = 0x82;
    Port A = 0x00;
    PresentFloor = 0x0c;
    while(1) {
        RequestedFloor = Port B;
        RequestedFloor = RequestedFloor & 0x0f;
        if (RequestedFloor != 0x0f && RequestedFloor
            != PresentFloor) {

```

else

Crash Down (C)

present floor  $\times$  = Requested floor;

Requested floor = Post B;

