

Elevator program

```
#include <stdio.h>
#include <reg51.h>
unsigned char xdata comhw at 0xe803;
unsigned char xdata portA at 0xe800;
unsigned char xdata portC at 0xe801;
" " xdata PresentFloor, RequestedFloor
Step = 0xf0;

unsigned long xdata count;
char PortA, PortB;
int count;
delay();
for (count = 0; count <= 4500; count++);
{
    reset();
    step = step & 0x0f;
    portA = step;
    step = step | 0xf0;
    portB = step;
}
Group C:
{ switch (requested floor)
{ case 0x0d : while (step < 0xf3)
{ step++;
portA = step;
delay();
} reset();
break;
case 0x0b : while (step < 0xf6)
{ step++;
portA = step;
delay();
} reset();
break;
```


store
67

```
case 0x07: while (step < 0x09)
{
    step++;
    portA = step;
    delay();
} reset();
break;
}

GoDown()
{
    switch (requested floor)
    {
        case 0x0d: while (step > 0xf3)
        {
            step--;
            portA = step;
            delay();
        } reset();
        break;

        case 0x0b: while (step > 0xf6)
        {
            step--;
            portA = step;
            delay();
        } reset();
        break;

        case 0x0e: while (step > 0xf0)
        {
            step--;
            portA = step;
            delay();
        } reset();
        break;
    }
}

void main()
{
    char command = 0x82;
    char portA, portB, requested floor, present floor
```


store
67

```
port A = 0xf0;  
presentfloor = 0x0e;  
while(1)  
{ requestedfloor = port B;  
  " " = requestedfloor & 0x0f;  
  if (requestedfloor <= request - presentfloor)  
    go up();  
  else  
    go down();  
  presentfloor = requestedfloor;  
}
```