

⑤

```
#include <stdio.h>
#include <reg51.h>
```

```
unsigned char xdataCommandWord - at - 0xe803;
```

```
unsigned char xdataPortA - at - 0xe800;
```

```
unsigned char xdataPortB - at - 0xe801;
```

```
unsigned char xdata PresentFloor, RequestedFloor, Step = 0xf0;
```

```
unsigned long xdataCount, i;
```

```
Delay()
```

```
{
```

```
for(count = 0; count <= 4500; count++);
```

```
}
```

```
Reset()
```

```
{ step = step & 0xf0;
```

```
portA = step;
```

```
step = step | 0xf0;
```

```
portA = step;
```

```
}
```

~~Group~~

c
Group 1)
{

switch(requested floor)

{

case 0x0d: while(step < 0xf3)

{

step++;

portA = step;

Delay(1);

}

Reset();

break;

case 0x0b: while(step < 0xf6)

{

step++;

portA = step;

Delay(1);

}

Reset();

break;

case 0x07: while(step < 0xf9)

{

step++;

port A = step;

Delay();

}

Reset();

break;

}

}

GoDown()

{

switch (RequestedFloor)

{

case 0x0d: while(step > 0xf3)

{

step--;

port A = 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()
```

```
{
```

```
Command word = 0x82;
```

```
portA = 0xf0;
```

```
presentFloor = 0x0e;
```

```
while(1) {
```

```
    RequestedFloor = portB;
```

```
    RequestedFloor = RequestedFloor & 0xf;
```

```
    if (RequestedFloor != 0xf && RequestedFloor != PresentFloor) {
```

```
        if (RequestedFloor < PresentFloor)
```

```
            GoUp();
```

```
        else GoDown();
```

```
        presentFloor = RequestedFloor;
```

```
    }
```

```
    RequestedFloor = portB;
```

```
}
```


