

STUDENT'S NAME		TOTAL MARKS OBTAINED
CLASS	SUBJECT	
ROLL NO.	DATE	

Program to demo the elevator interface

```
#include <stdio.h>
#include <reg51.h>
unsigned char xdata CommandWord -at- 0xc803
```

```
unsigned char xdata PortA -at- 0xc800;
unsigned char xdata PortB -at- 0xc801;
unsigned char xdata PresentFloor, RequestedFloor;
static = 0xf0
```

~~step = 0xf0~~

~~void~~

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

```
delay()
{
```

```
for (Count = 0; Count <= 4500; Count++)
{
```

```
    ;
```

```
}
```

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Reset()

{

step = step & 0x0f
port A = step;
step = step | 0xfo
port A = step;

}

Group()

{

switch (requested floors)

{

case 0x0d: while (step < 0x0f3)

{

step++;

port A = step;

delay();

}

reset();

break

case 0x0b: while (step < 0x0f6)

{

step++;

port A = step;

delay();

}

reset();

break;

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case 0x07:

while (step < 0xf4)

{

step++;

port A = step;

delay();

}

reset();

break;

}

}

void godown()

{

case 0x0d:

while (step > 0xf3)

{

step--;

port A = step;

delay();

}

reset();

break;

case 0x0b:

while (step > 0xf6)

{

step--;

port A = step;

delay();

}

reset();

break;

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```

case 0x0c: while(step > 0xfo)
{
    step--;
    portA = step;
    delay(1);
}
reset();
break;
}

```

```

void main()
{

```

```

    CommonWord = 0x82;
    portA = 0xfo;
    presentfloor = 0x0e;
    while(1) {

```

```

        Requested floor = portB
        Requested floor = Requested floor & 0xaf;

```

```

        if (requested floor != 0xaf && requested floor
            != present floor) {

```

```

            if (Requested floor < Present floor)
                goto(1);

```

```

            else

```

```

                goto(1);

```

```

            present floor = requested floor;

```

```

        }
        requested floor = portB
    }
}

```