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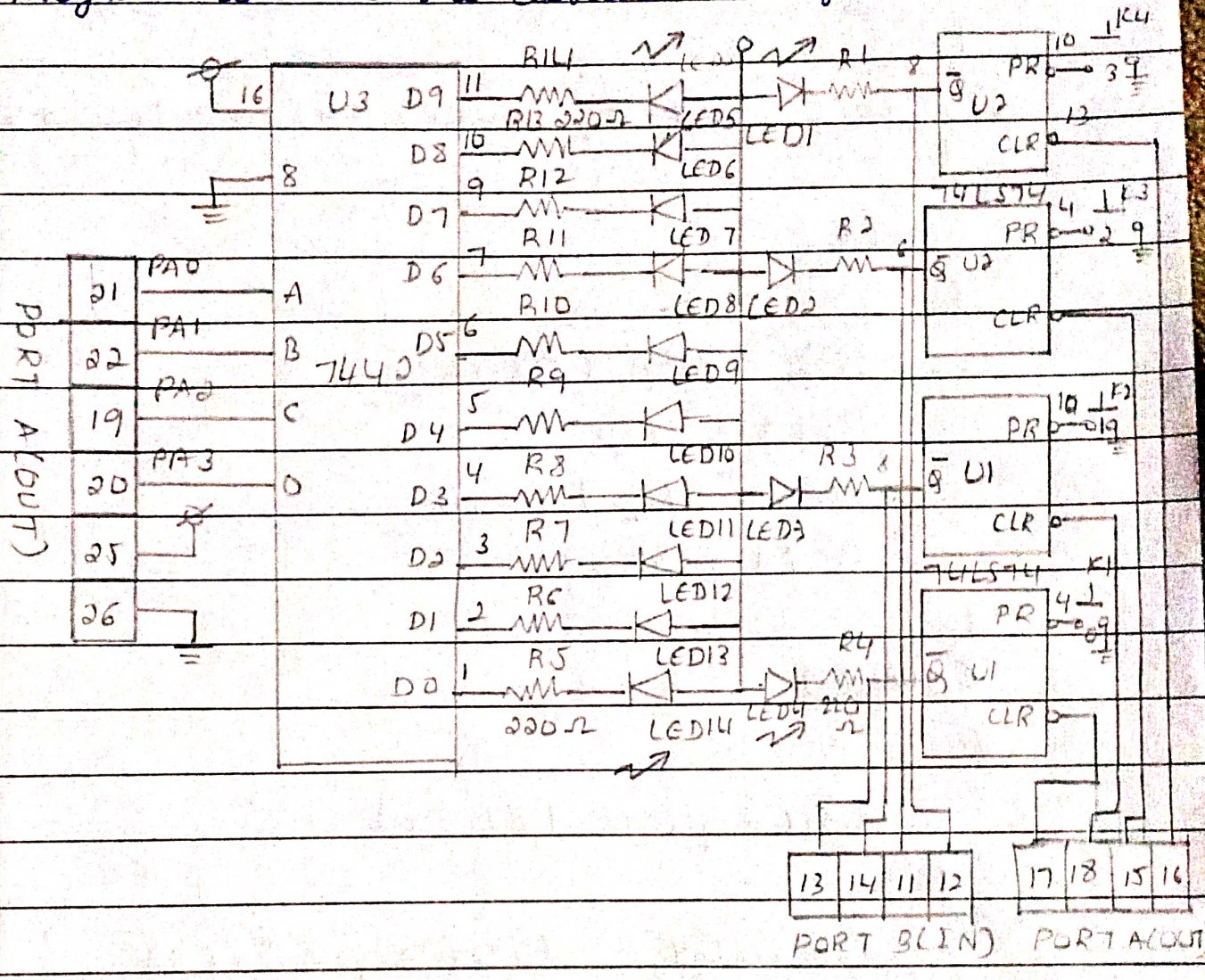
Program to demo the elevator interface




```
#include<stdio.h>
#Include<reg51.h>
unsigned char xdataCommandWord _at_ 0xe803;
unsigned char xdataPortA _at_ 0xe800;
unsigned char xdataPortB _at_ 0xe801;
unsigned char xdataPresentFloor, RequestedFloor
Step = 0xf0;
unsigned long xdataCount, i;
```

```
Delay()
{
   for(count=0; count<=4500; count++);
}
Reset()
{
    Step = Step & 0x0f;
    PortA = Step;
    Step = Step | 0xf0;
    PortA = Step;
}
GoUp()
{
  switch(RequestedFloor)
  {
    case 0x0d : while(step<0xf3)
                {
                    step++;
                    PortA = Step;
                    Delay();
                }
                Reset();
                break;
    case 0x0b: while(step<0xf6)
                {
```

```
        Step++;
        PortA = Step;
        Delay();
      }
      Reset();
      break;
case 0x07: while(Step< 0xf9)
           {
             Step++;
             PortA = Step;
             Delay();
           }
           Reset();
           break;
    }
}
GoDown()
{
  switch(RequestedFloor)
  {
    case 0xDd: 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()
{
  CommandWord = 0x80;
  PortA = 0xf0;
```

```
PresentFloor = 0x0e;
while(1){
  RequestedFloor = PortB;
  RequestedFloor = RequestedFloor & 0x0f;
  if( RequestedFloor != 0x0f && Requested
      -Floor != PresentFloor)
          GoUp();
  else
          GoDown();
  PresentFloor = RequestedFloor;
  }
  RequestedFloor = PortB;
}
```