

Q) Draw a step by step interface to make
the motor in anti-clockwise

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

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

```
char xdata port_at - 0xE808;
```

```
char xdata port_at - 0xE800;
```

```
char j_id at acc_at 0x30;
```

```
delay();
```

```
{ int j;
```

```
for( j=0; j<800; j++ )
```

```
    {
```

```
void main()
```

```
    port = 0x80;
```

```
    while(1) -
```

```
        { acc = 0x11;
```

```
            porta = acc;
```

```
            delay();
```

```
            acc = 0x22;
```

```
            porta = acc;
```

```
            delay(); }
```

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acc = 0x44 ;

porta = acc ;

delay(); ;

acc = 0x88 ;

delay(); ;

{ }

{ }

(2) Clockwise - rotate :-

#include <stdio.h>

#include <reg51.h>

void main() -

{ void delay(); ;

wheel(); ;

{ po = 0x00 ;

delay(); ;

po = 0x0C ;

delay(); ;

po = 0x09 ;

delay(); ;

po = 0x03 ;

delay(); ;

{ } ;

{ void delay(); ;
void wait, int(); ;

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for (int = 0 ; int < 254 ; int++) -
for (int = 0 ; int | < 254 ; int |++) -

{

(8) Display message with flickerence FIRST Eg help alternative effect on 7 segment

#include <stdio.h>

#include <reg51.h>

char x data control at 0xE803;

char x data port B at 0xE801;

char x data port C at 0xE802;

char font[20] - { 0x8e, 0x49, 0x4d, 0x46, 0x4f, 0x4f,
0x4f, 0x89, 0x86, 0xc7, 0x80 };

delay () -

{ long u;

for(u=0; u<800; u++) -

}

void main() -

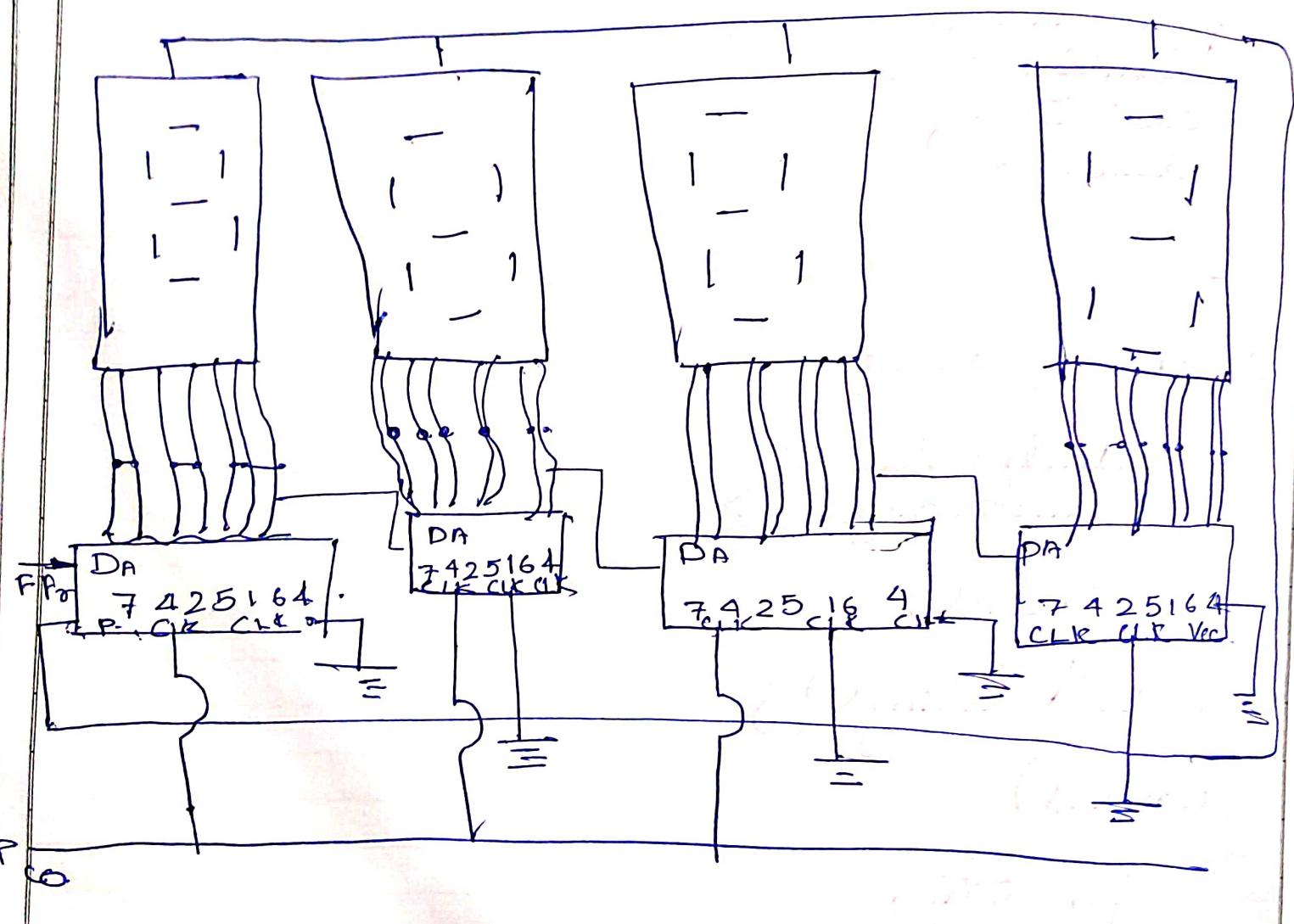
{ int d, b, j, m;

unsigned char k;

comon W = dx80,

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Diagram 8 -



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do

2 ~~i=0;~~ i=0;

for(d=0;j<3;j++)

2 for(b=0;b<4;j++)

2 K = hex
t[i++];

for(j=0;j<8;j++)

2 m = k

K = K & 0x80;

3

if(k==00)

houtB = 0x00;

else

houtB = 0x01;

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$$\begin{aligned} \text{host C} &= 0x01 \\ \text{host C} &= 0x00 \\ C &= m \end{aligned}$$

$$C \ll = 1$$

{

{

delay (C)

{}

while (i)

{

Q1

Program to demo the interface :-

```
#include <stdio.h>
#include <reg51.h>
unsigned char xdata CommandWord = 0xE80,
unsigned char xdata PortA = 0xF000,
unsigned char xdata PortB = 0xE801;
unsigned char xdata different, requested floor;
step = 0xF0;
```

```
unsigned long xdata count, i;
```

Delay()

```
{ for (count = 0; count <= 1500; count++); }
```

{}

Reset()

```
Step = step & 0x0F;
```

```
Port A = step;
```

```
step = step | 0xF0;
```

```
Port A = step;
```

{}

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(Gough C)
S switch (Repetitive flow)

case oxod; while (step < oxj3)

{ step++ ;

root A = step ;

delay () ;

}

break ;

break ;

case oxob: while (step < oxj2),

{ step++ ;

root A = step ;

delay () ;

}

break ;

break ;

case oxot : while (step < oxj1) .

{ step++ ;

root A = step ;

delay () ; }

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Reset();
break;

3
3

Go Down();

2 switch (Requested Floor);

2 case mode : while (step > of 3).

2 step --;
foot A = step;
Delay();

3

Reset();
break;

case mode ; while (step > 0);

2 step --;

foot A = step;
Delay();

3

Reset();
break;

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ax oxot: while (step > oxrq).

2 step -
host A = step;
delay();

3
Request();
break;

3 }

void main () -

2 commandword = ox82;

host A = ox f0;

presentFloor = ox0E;

while (1) -

2 if RequestFloor = host B;

RequestedFloor = RequestFloor & ox0f;

if (RequestedFloor) = ox0f {
 RequestFloor
 ! = presentFloor.

2 if (RequestedFloor < presentFloor).

Group();

else
Group();

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present floor = Required floor;

3

Required floor = Root $\frac{P}{g}$

3

Q5) PRINT BANGALORE IN SEVEN SEGMENT DISPLAY

~~Ans #include <stdio.h>~~

~~#include <reg51.h>~~

char xdata CommW at 0xe803;

char xdata PortB at 0xe801;

char xdata PortC at 0xe802;

char [80] = {
 0x0f, 0xf, 0x1f, 0x1f, 0x83, 0x88,
 0xc8, 0x82, 0xc7, 0xc0, 0x0f, 0x86},
 ij;

delay()

{ long u;

for (u = 0; u < 1000; u++);

}

void main()

{ int d, b, j, m;
 unsigned char k;
 CommW = 0x80;

do

{ @ i = 0;

for (d = 0; d < 1; d++)

{ for (b = 13; b > 0; b--) }

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2 delay();

$k = \text{port}[i++]$
 $\text{for}(j=0; j < 8; j++)$

2 $m = k;$

$k = R \& 0x00;$

2 if ($C == 00$)

$\text{port}B = 0x00;$

else

$\text{port}B = 0x01;$

3

$\text{port}C = 0x01;$

$\text{port}C = 0x00;$

$k = 00;$

$k \ll= 1;$

33

delay();

33

while (1);

3

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