8051 Microcontroller Programs 1. Drive a Stepper motor interface la rotate & motor in Anti-clockwise by N stepts. Inted Suitable delay between successive steps. # include < stdio. h> Hånclude (Reg 51.h) char xdata post\_at\_ Oxe803; char xdata porta \_at\_ 0xe800; Chazidataacc \_at\_ 0x30; delaye) 2 ûnt j; for (j=0; j2800; j++) void main () 2 post = 0x0, while(1) { post acc = 0x11; porta = acc; delay(); acc = 0x22; porta = acco delay [); acc = 0x33; parta = acc; delay (); acc = bxyy; plorta = acc; delay (); rBM:1915168

Drive a stepper motor interface to rotate the nvotor in clockwise by N steps. Introduce suitable delay between successive steps. #include(stdio.h) #include (reg 51.h) char xdata post -at 0xe803; char xdata porta -at- 0xe800; Charidataacc - at - 0x30; delay () { vint i; fol(j=0; j<8000; j++) } void main () Port = 0x80; while(1) { acc = 0x88; porta = acc; delay (); acc = 0×44; Porta = acc; delay(); porta = acc; delay (); cice = 0 × 11; Porta = acc; delayc);

Display messages FIRE and HELP alternately with flickering exects on a 4-segment displan interface for a suitable period of time Envy flashing sate that makes it easy to read both the messages. 7425164 7425164 7425164 #include Lstdio.h> #finclude Loreg 51.h) char xdata Commw -at- 0xe803; char x data ports -at- 0xesog. char xdata port -at- 0xe802; char port[20] = {0x8e, 0x99, 0xde, 0x86, 0xff, 0xff, @xff, 0xff, 0x89, 0x86, 0x(7, 0x8E), i; delay () 7 long u; #08 (u=0; u<8000; u++) 18M19CS168

inthe

void main () { suct d, b,j, m; unsigned than k; Commw = 0x80; do for (d=0; d23; d++) { for (\$=0; bey; bet) { K = post [i++]; for (j=031 28) 3++ { mik; K = k& 0x80; { if (k == 0) Ports =0 × 00; portB=0x81; port c= 0x01poitc = 0x00; ·K= m; KLL=15 delay();

while (1)

MBM19cs168

messages BANGALORE in rolling Display fashion on a 7-segment display interface for a suitable period of time. #include/stdio.h> #include Long 1.h> Char xdata Commw-at- 0x803; char rdata posts -at- 0x801; chas xdata porte -at- 0x8802; char port [20] = { Oxft, Oxft, Oxft, Oxft, 0x83, 0x88, Ox c8, 0x82, 0x88, 0xc7, 0xc0, 0xAF, 0x86), i; delay () I long 4; for (n=0; nc4000; n+1); Void main() 2 ant d, b, j, m; unsigned than k; Commo = 0x80; { i=0; for(d=0;de1;d++) { for (b=13; b>0;b--) E delay (); K = pott(i+); for (j=0; j28;j++) { m=k; k= k&0x80; rbml9csl68 Swithap

 $\begin{cases} \text{if } (K = = 00) \\ \text{port } B = 0 \times 00; \\ \text{else} \\ \text{port } B = 0 \times 01; \end{cases}$ portc = 0x01; PORTC = 0x00; K=W; KLZ=13 delay ();. while (1)

demonstrat Program 20 20 A LEDG 91 (g) 1 (B) 8 (B) 2 MEDIL MEDI TEDIA LEDA tabl श वजा 9631 LED 3 Port B (In) 189 7 784 81 9 Port A Court 02 G

stendude Zstdio. h> Hündlude Lheg 51.h> unrighed char exclata Commandword -at- 0xe803; unsigned char xdata PortA -at 0xes00; unsigned char xdata Ports -at- 0xe801; unsigned that redata Pruntfloor, Requirted Floor, Step = 0xf0? Unsigned long xdata count, is; delay () 7 for (count =0; coun <= 4500; count ++) reset () ? Step = Step & 0x0f; portA = step; Step = Step 1 0xf0; port A = Step; Goup!) { Switch (Requested Forosa) 2 case 0xod: whilestyc (0xf3) ? Step++;
PortA = Step; delay(); reset(). breaks.

case 0x0b: While (Stypc 0x96) { Step++= portA = Step; delay(); speset (); break; case 0x07: while (Step 2 0xfg) { Sty++;
portA = Step; dclay();
Leset(); break; GoDown () { Switch (Requested Floor). ? case oxod: while(step) oxf3 · Estep = ;

PortA = step; delay(); reset(); break; case oxob while (Step > Oxf3) { step -- ; PortA = step; Doreak;

2 Step --;
port A = Step;
delay();
zeset(); bereak; void main () 2 commandword = 0x82; PONA A = Oxfo: Bruntfloor= 0x0e; while(1) { Requisted floor = PortB; Requested floor = Requested floor & Ox Of; if (Requestedploor) = 0x0f 122 Requesembledploor != Presentfloor) if (Requested Floor & Present Floor) Goups; else GoDown (); Present boor = Requisted Floor;
Requisted floor = Port B; 1BM1965168

case 0x0e: while (step > 0xf0)