Microcontroller 1BM19EE025 1) Drive a Steffer Motor interfore to notate the motor in anti-clockwise by N-steps. Introduce suitable delay 6/w successive steps stindude « stdio. h? #include < reg 51.h. char xdata fort -at- 0xe803; der xolata poèta _at_ 0xe800; char idata acc _at_ 0x30; olelay () for (j=0; j < 800; j++); void main () Lost = 0x80; while (1) $f = 0 \times 11$ porta = acc; delay (); acc = 0 x 22; porta = acc; 0 x44; forta = ace; delay(); delay (); acc acc = 0 x 8 8; porta = acc; y delay ();

3) Derign the steffer motor to rotate the motor in clocking direction. Hindude coldio. h? # include < reg 51. h? char xdata post_at_0xe803; xdela forta-at- 0xe800; idata acc_at_0x300% char wid delay for (at I =0; i < 800; 1+1); Lost = 0x80; while (1) occ = 0x 88; poeta= acc; dolay (1); all = 0x 44) horta zou; dday (); ou = 0x22; forta = ou; delay (); occ = 0 x11', porta = ace; delay(1)

2) Diplay mensages FIRE and HELP alternately with bileving effects on a 7-request display interface for a flavoir read both the merages. Hindude cotdia-h? Hinchole < reg 51.h7 char xdota (ommw _at_ 0xe803; char xdola forth - at - 0xe801; das xdeta forte -at- 0xe 802; der fort[20] = d0x8e,0xf9,0xde,0x8,0xff,0xff,0xff,0xff,0xff,0x89, 0286,0267,02869, 1) delay () long u; for (u =0; u < 8000; u+t) word main () int d, b, j, m; unsigned dos k; (ommw = 0x80; 1=0% for(d=0; d23; d+1) d for (6=0;664) K = hort [i+1]

K = K & 0x80/ if (k=0)port $B=0\times00$;

else

port $B=0\times01$; portc = 0 xol; horte = 0x00; Rea=1; delay (); while (1);

Jo Disflay Bangalow in serving farmion. #include a stolio. h= Jimbole C stolli 6. h> finduale < nog 51. h.7 that xdata red at 0xe803; idda an portc-d-0x2802; hat [20] = {0xff, antf, 0xff, 0xff, 0xff, 0x83, 0x88, 0x62, 0x82; 0x82, 0xe7, 0x86},i; word dalay () for(int i =0; i =4000;) ++); wand main () mt id, b, j, m; undigned dar k; (omm = 0x80/ dol toi i=0% for (d=0; d=1; d++) for(b=0; b213; b++) d dday (1) k= bot(i+); for (3=0)3 L8; 1 H) on = k; k = k&0x80% if (1 == 0) ports = 0200) hode = 0 xol; fotic=0x01; fotic=0x00; K=m; K22=1; 4 & Lalar (1; 33 white (1))

Program to demo the elevator interface. # include 2 stdio. hr # include < reg 51. h7 uniqued das xdata (omnadword - at - 0xe 803) uniqued des xolata PortA -at- 0xe 800; uniqued char xdata Ports -ot - 0xe 801; uniqued don x data besent Hoor, Requested Hood, alop = 0x60; uniqued long xdata (out, i) Delay () for ((out = 0; (out c= 4500; (out ++)); first () step = step & oxof; PortA = Step; step = Step 10xf0; PostA = Slip; youp 1) moitch (Regneted Floor) 0xod: while lotep < 0xf3) detep++, PortA = Step; Deloy ()

while (other < 0 x 6) ax oxob: BodA = Stap; Aday (); Pert ()', break; 0x07; which (Alap c 0x F9) Port A = Step; Dolay (1) be eak, yo Down()

desit in (Required Flood)

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(are oxod: while (Atap > 0xf3)

Port A = step;

Pulay(); break,

while (etter >0xf6) PostA = Step; Aday (), Rest (); break', 0x0e: wohile (otet > 0xf0) PostA = Stap; Dolay (); leset (); break', void main!) endword = 0x82'/ PotA = 0xfo; Present Floor = 0xDe; while (1) of legueted Hood = Portb; Reputed Floor = Request of Floor 20x0f; if [Reputal Floor != 0x0x se requested floor != Present Floor) } if (Reguested Floor C Present Floor) Present floor - Requested floor; Requested Flows = Port B;