PART-B

ESSAY QUESTIONS

1. Assuming XTAL =22 MHZ, write a program to generate a pulse train of 2 seconds period on pin P2.4. Use Timer 1 in mode 1.

Assuming XTAL = 22 Mhz, write program to generate a square wave of frequency 1 Khz on pin

Write program to toggle only bit P1.5 continuously every 50 ms. Use Timer 0, mode 1.

Write program to create a frequency of 2500 Hz on pin P2.7. Use timer 1, mode 2 to create the delay.

Assume that a 1-Hz external clock os being fed into pin TI(P3.5). Write program for counter 1 in mode 2 to count up and display the state of the TL1 count on P1. Start the count at 0H.

Assume that 60 Hz external clock is being fed into pin T0(P3.4). Write a C program for counter 0 in mode 2 to display the seconds and minutes on P1 and P2, respectively.

with XTAL=11.0592 Mhz, find the TH1 value needed to have the following baud rates. a) 9600 b) 2400 c) 1200

Write C program to transfer the letter "A" serially at 4800 baud continuously. Use 8-bit data and 1 stop bit.

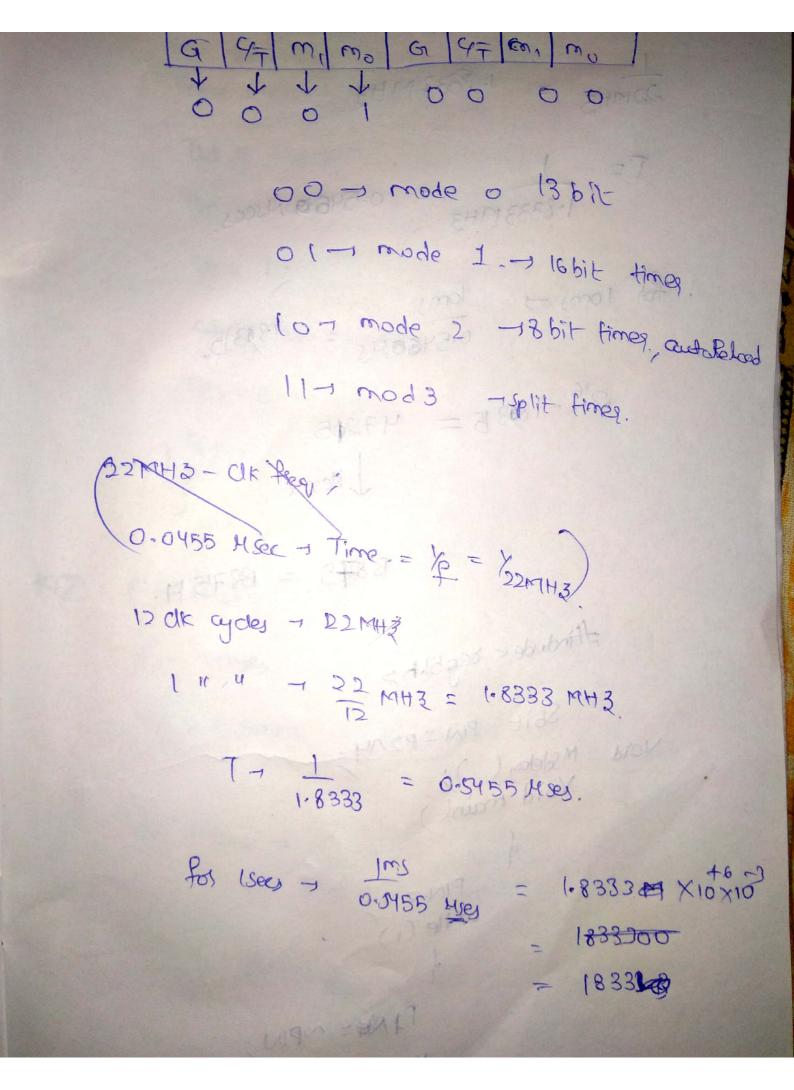
Program the 8051 In C to receive bytes of data serially and put them in P1. Set the baud rate at 4800, 8-bit data and 1 stop bit.

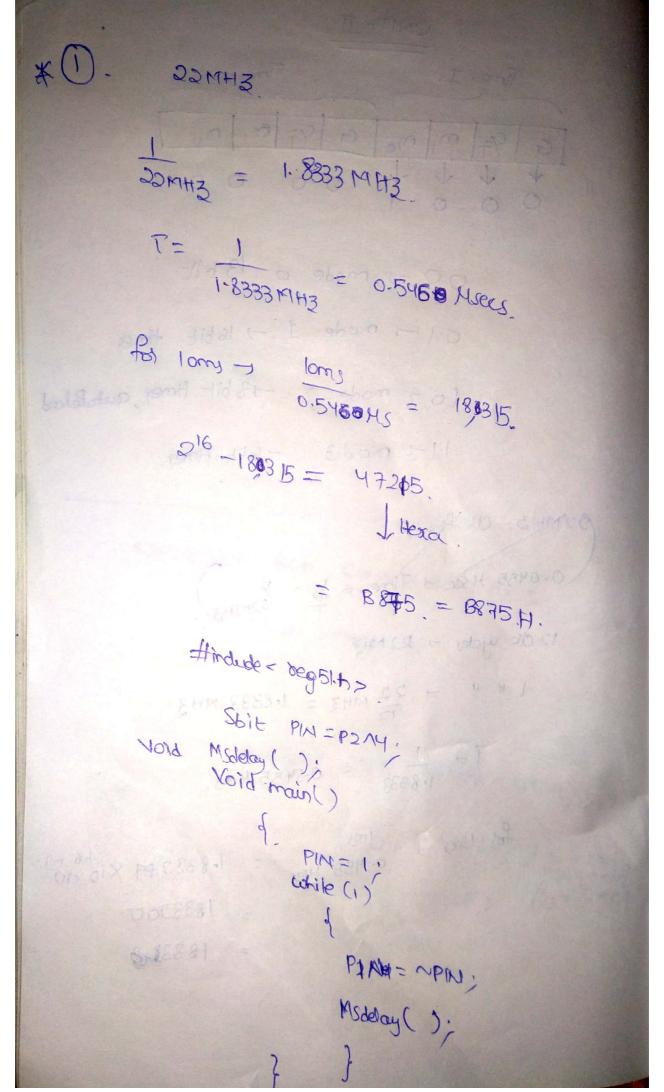
. Write C program to send two different strings to the serial port. Assuming that SW is connected to pin P2.0, monitor its status and make a decision as follows:

SW =0 send your first name

SW = 1 send your last name

Assume XTAL = 11.0592 MHz, baud rate of 9600, 8-bit data, 1 stop bit.





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SHIEPPREN Shubrith Msdelay() Yold chig = m - gd unyinged char i;

for (i=0; i<10; i++)

TMOD = 0×10; TL1 = 0x75: THI = OXB8; TR1 = 1; · Municipal cohile (TFI==0). TR1 = 0 3 TF1=0;

chile (1) EHM CPO.II P=~p; LOSTS MHS msdelay (); EHM 21 CP.0 = Void midelay (pr 260-1 = mareno 2) the assigned day is 2 2) took = Time for G = 0: 1 < 5/1/1++) = 2 moly TMOD = 0x 20. THI = OXDB; and a the TRE =1. chile (TA ==0). 3 3 min way

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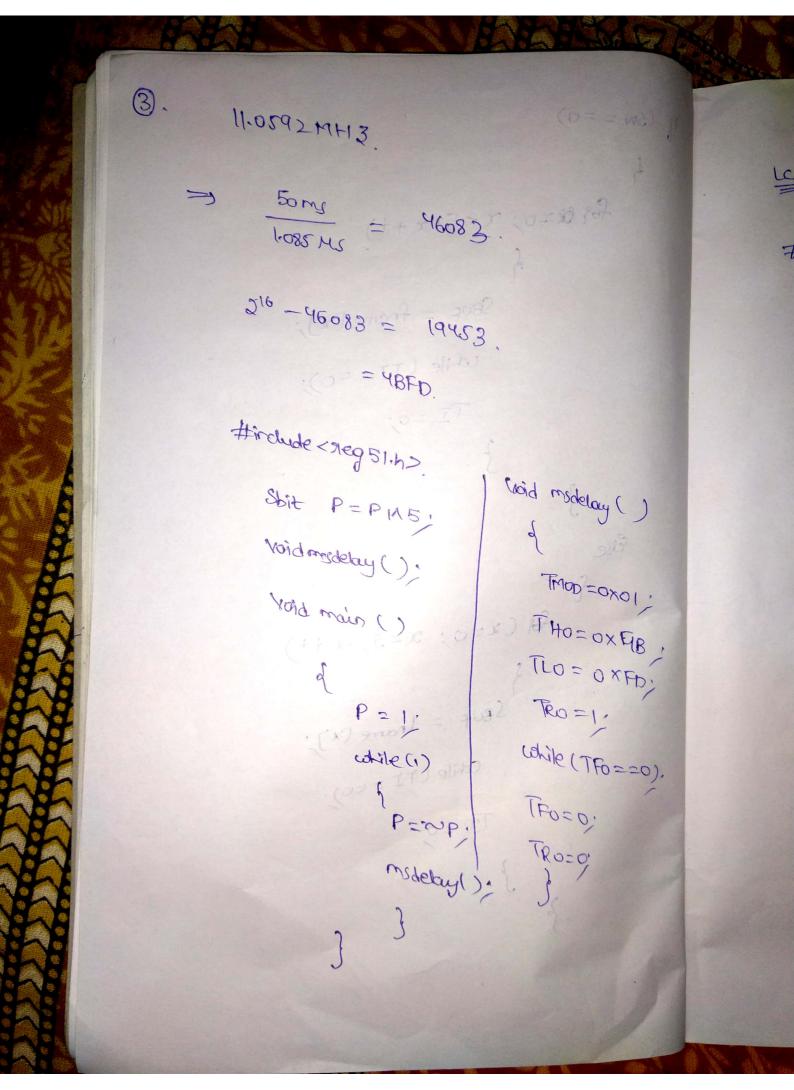
Hor Hindude Oreg 51.12 Shit TI = P315. Void main () TM00 = 0x60; THI= 0; = 9 catile (1) TR1=1. PI=TLI. while CTAISSO). TF1=0, TR =0;

include < neg51.h > 48007 PA Vold main () 96007 FD TMOD = OX20. THE OXFA: SCON = 0 x 50. TRISI while (1) SBUT = IA! copy (12 ==0). TI = 9

#indude < reg 51. h> & Void main () tensinged chaq mybyte. Tmop = 0x20: THE OXFA! / 4800 Bound Rode Scor = 0 x50; ordine (1) & () riem bior PIE MYBYE. My sound & OJ grown Parties. of pool officers 65 x 0 = 0014/3

*. Sw- P210. if so = 0 - fast range if sw=1 > lost name. TMOD = 0,720. The code 9600 Bagoan; - #Include < 90951: 15 Shit SW = P210; Void main () Just anigred char frame[] = "Shiva". consigned char traine () = "kurae". ensinged about x: Mode ox20; THI= OXFD. SCOM = 0×50; TRI= !

If (SW = =0) EHM CPTON for 62:-0; x < 5; x ++) SBUR = frame [x]; 7 = 0; 2 = 0; 2 = 0; 2 = 0; 2 = 0; 2 = 0; 2 = 0; 2 = 0; 2 = 0; 2 = 0; 2 = 0; 2 = 0; 2 = 0; 3 = 0; 4 = 0; 4 = 0; 5 = 0; 6 = 0; 6 = 0; 7 = 0; 8 = 0; 9 = 0; While (TI ==0); Else 371x0=00fel (x=0; x<5; x++) J=09. SBOF = Thame (x).



CAUT- IV 100 * Cug #indude < 91eg51.h> Sto lada = 0x90; Stit & ERZNO: Shit down Pani Stit En= P212. Void main () bymanne (time)) led comb (0x38) 10v = mobil Mudelay (250). fag cup (OXDE); roydeby (250). led and (or oil) us gard (520). fry cuy (0x0e). ungepå (500). [cg and (0 × 8e)] 10 Sakkey (250).

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laddata ('M'); Midelay (200) (ddata ('D'); roydeby (200). :OPXO - abold of ladete (E'). · 0109=38 41. 11AC9 = wó 160 Modelay (250). CACT = 13 388 Void ledand (wranged that value) Idata = Value : 200 doo bol 85 = 0, (035) relap/W De =0; (30x0) do los En 21; (000) whole Poydelay (10); en=0; (10%) (10%) (DOXO) but by · (1000) velstro 1 (08 x0) bio 30) · (000) poddolor

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Void led data (cerrigned dad value) Idala = value. 85=1 10=W8 En=1) forydelay (10). En=0; Void midelay (udsigned chas time) for G=0; iz time, i++) forg =0, j < 10 75, j++).