Ain shams university
Faculty of engineering
Computer engineering and software systems programs

Course: **Microcontrollers** (CSE 316)

<u>Stopwatch</u>

Submitted by: Shehab Ahmed Hassan Kotb   16p6014

Basil Essam Abd El Fattah   16p6013

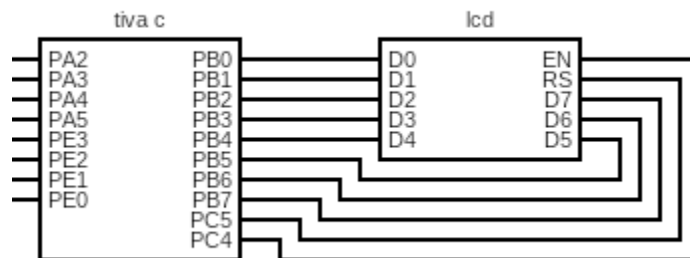Hazem hamada Abdellaif   16p3100

Gasser Tarek ali   16p6024

Group 12

Submitted to: Dr. haytham azmi
Eng. Mostafa Arafa

Work split table

function	file	developer
void displaySecFractions() int main()	StopWatch.c & StopWatch.h main.c	shehab
void enableTimer() void disableTimer()	StopWatch.c & StopWatch.h	basil
void oneShotConfigure(void) & Ports initialization	StopWatch.c & StopWatch.h Port_INIT.c & Port_INIT.h	gasser
void displayTime(int sec, int min, int hour) void BlinkLed(void) bool getOvrFlwFlg()	StopWatch.c & StopWatch.h	Hazem Hamada

Block diagram

bonus

- The stop watch contiues where it left off if the start button is pressed when the stopwatch is stopped.
- The stop watch is formated to diplay hour & minutes and can count up to 2^32 hours & minutes.