Smart Pill Box - There are 5 compartments which can hold separate types of medicine. User can have separate alarms for different times of the day and input the required doses of each type of medicine. Once it is time to take medicine, alarm will ring and the required doses will be indicated

1) By pressing SET TIME button, user can change the time and date as required.(With the use of UP/DOWN buttons)

2) By pressing SET ALARM button, user can navigate the separate alarms. For instance if SET ALARM button is pressed once, the screen will blink on alarm 1. From there to navigate the alarm 1, by pressing SET_TIME button user can change the alarm 1 time, ON/OFF(Pressing buttons UP-ON, DOWN-OFF) and the required doses of each medicine in separate compartment. (Use UP/DOWN buttons to increment/decrement)

3) Once the alarm rings, press the SET ALARM button to stop the alarm (It will ring for 30 seconds otherwise. This duration can be changed later). Then the required doses will be displayed. User has to press the SET ALARM button to confirm they took the medicine. Then the display will be go back to the time screen. If user fails to confirm they took the medicine within a certain period of time(It is set as 10 seconds for now. Will be changed later), a message will display showing the user has missed their medicine.

In the folder "Code", there is an Arduino filed named as "pillbox_code". Compile it and copy the destination hex file location and paste it on Arduino properties on proteus.

Arduino libraries that have to be installed (They are in the folder "Arduino Libraries")

- **DS3231.h**
- **Wire.h**
- **LiquidCrystal_I2C.h**