# Standard procedure for working on projects:

1. Make a block diagram of whole system.
2. Make a table of input and outputs.
3. Make flowchart of solution.
4. Write code in c.
5. Make circuit and simulate using hex file.

First project:

Objective: connect 10(0-9) push buttons, LCD display , LED, Buzzer to the arduino , if 0-3 pushbuttons state is one then the LCD display shows digits, otherwise buzzer on and led on, LCD display does not shows any digits.

Block diagram: Arduino

LCD 0 push buttons

Buzzer

bbbbbbb

LED 8

Input and outputs:

|  |  |
| --- | --- |
| inputs | outputs |
| 10 Pushbuttons (0-9) | LCD display,  Buzzer,  LED |

Flow chart:

Start

Enter password,, press pushbuttons

Push button state (0-3)==1

False

True

Buzzer on, LED on, doesn’t display anything on LCD display

Display digits on LCD display

Stop