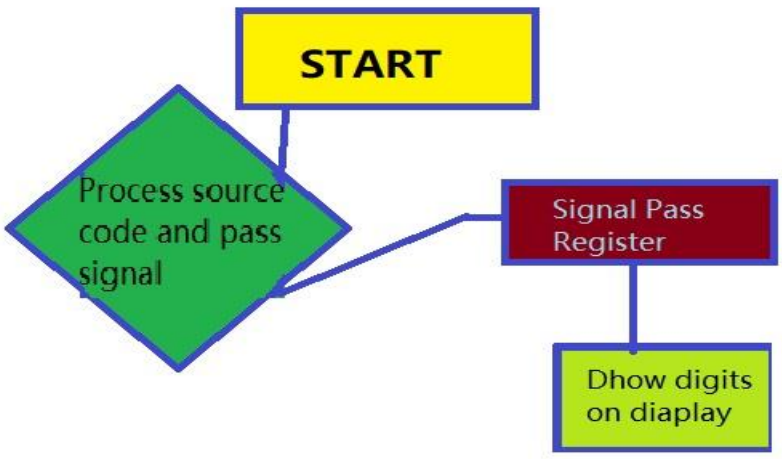
Hubei University of Technology

Experiment report

Grade	

Course name	Embedded SYSTEMS AND DESIGNS			
Experimental name	EXPERIMENT 2 – **7 Segment LED display and control**			
Departments	COMPUTER SCIENCE	**Lecturer**	Dr. Liu Chun	
Name	**Rimon Mahmud**	Student id	**1811561124**	
Experimental purpose	The aim of this experiment is to design a 7 segment LED display and control system using the 8051 microcontroller.			
Experimental preparation	**1.Experimental environment:** PROTEUS 8 PROFESSIONAL, WINDOWS 10 **2.Knowledge preparation：** AT89C51 processor,8051 Architecture, C language, 8051 Instruction set.			
Experimental content	7 segment LED display and control with Processor: AT89C51			
Experimental analysis	"7 segment LED display and control" Project is a functional example of AT89C51 Processors			
Experimental flowchart				

Code

```
/* Main.c file generated by New Project wizard
 *
 * Created:   Tue Nov 10 2020
 * Processor: AT89C51
 * Compiler:  Keil for 8051
 */

#include <reg51.h>
#include <stdio.h>

//unsigned char code table[10]={0x3f,0x06,0x4f,0x66,0x6d,0x7d,0x07,0x7f,0x6f};
unsigned char code table[10]={0x3f,0x5B,0x06,0x4f,0x66,0x6d,0x7d,0x07,0x7f,0x6f};


void delay(){

  unsigned int x,y;
  for(x=0;x<=200;x++)
  {
    y++;
    }


  }

void main(void)
 {
  // Write your code here
  while (1){
    P0=table[1];
    delay();
    P0=table[2];
    delay();
    P0=table[3];
    delay();
    P0=table[4];
    delay();
    ;
  }
 }
```