AIM: Password Protection Using Cmd. With µ- Controller

Component Required:

µ- Controller- AT89C51

Keypad – Smallcalc

LCD – LM0162

IC – L293D

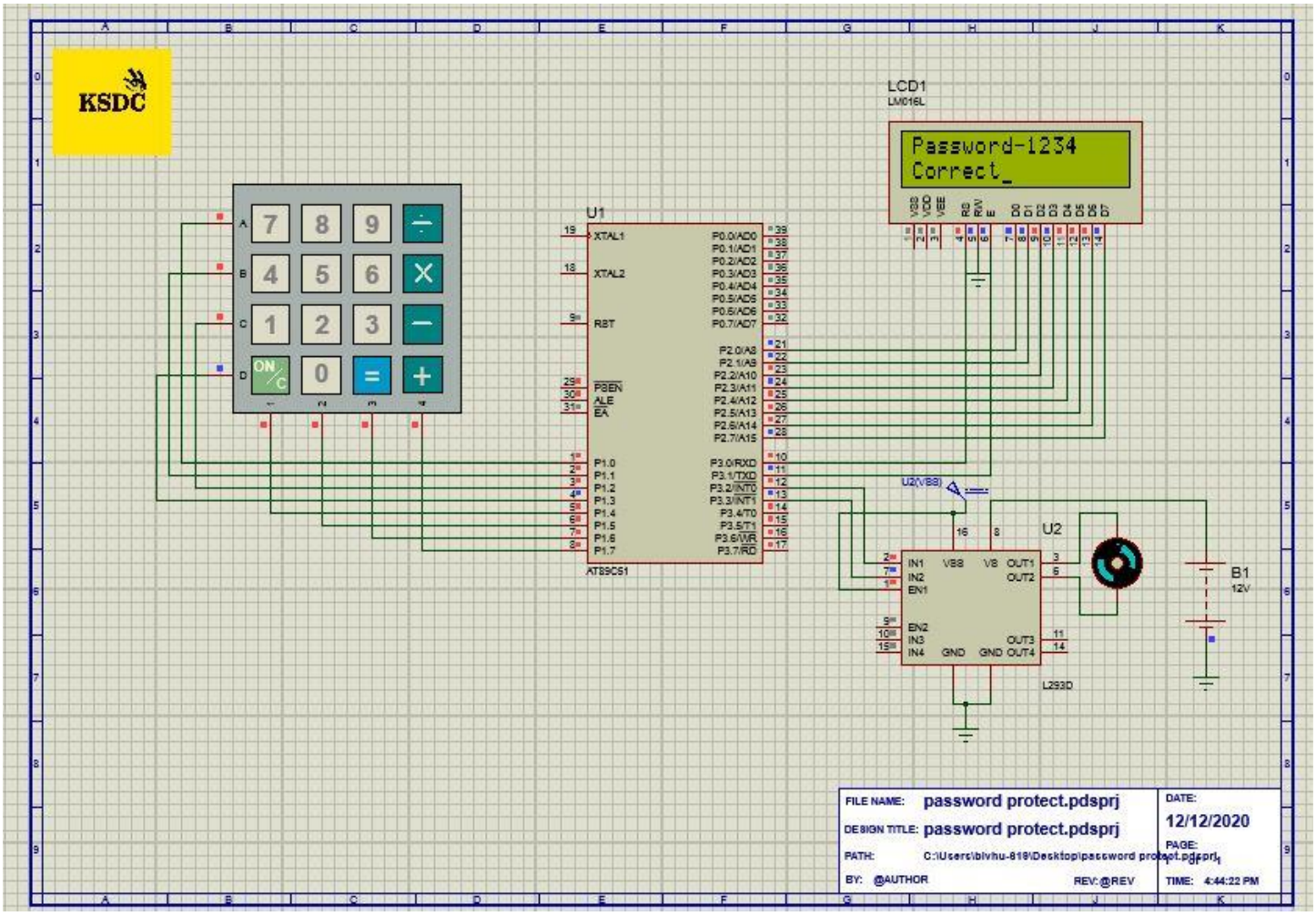
Motor 12 V

DC – Source 5V

Battery 12V

Ground

And Your Brain



keil u Vision Software

1) Type code or Copy in to notepad
2) Save the File extension .c
3) Open the keil u Vision Software
4) Project
5) New Project
6) Type your project Name
7) Search your Microcontroller Name Courtly while creating new Project
8) Add your .c file in your project

(-)Target .1

(+)Source group-1 (Right Click on it)

- Add Existing files to Group (Source group-1)
- Then Select your .C file.

9) Right Click your .C file.
- Build target.

10) Right Click on Source group-1
- Re-Build Target.

11. Right Click on Target-1

- Go to out put
- Create hex File.
- Go to select folder for object.
- And select you're save Path
- Then Ok

12. Right Click on the Source group-1

- Build all Target files.

13. Again Right Click on the Source group-1

- Re- Build all Target files.

(+) C. file Click here

Reg 51.h (automatic Create a new file under .C file)

Check Your File Location, hex file create in your contain folder.

Done

CMD

```
 #include<reg51.h>
#include<string.h>
sbit RS = P3^0;
sbit EN = P3^1;
sbit IN1 =P3^2;
sbit IN2 = P3^3;
void delay(int a)
{
        int i,j;
        for(i=0;i<a;i++)
        for(j=0;j<255;j++);
}
void cmd(char cm)
{
        P2 = cm;
        RS = 0;
        EN = 1;
        delay(1);
        EN = 0;
}
void dat(char dt)
{
        P2 = dt;
        RS = 1;
        EN = 1;
        delay(1);
        EN = 0;
```

```
}

void display(char *lcd)
{
        while(*lcd != '\0')
        {
                dat(*lcd);
                lcd++;
        }
}
void lcdint()
{
        cmd(0x01);
        cmd(0x38);
        cmd(0x0E);
        cmd(0x80);

}

void main()
{
        char pass[5] = "1234";
        char pass2[5];
        int i=0;
        char *ptr;
        ptr = pass2;
        lcdint();
        display("Password-");
        pass2[4]='\0';
```

```
        while(1)
        {
        while(i<4)
{
        P1=0xFE;
        if(P1==0xEE)
        {
                *(ptr+i)='7';
                dat('7');
                delay(200);
                cmd(0x06);

                i++;

        }
        else if(P1==0xDE)
        {
                *(ptr+i)='8';
                dat('8');
                delay(200);
                cmd(0x06);

                i++;

        }
        else if(P1==0xBE)
        {
                *(ptr+i)='9';
```

```
            dat('9');
            delay(200);
            cmd(0x06);

            i++;
}
else if(P1==0x7E)
{
            *(ptr+i)='/';
            dat('/');
            delay(200);
            cmd(0x06);

            i++;
}


P1=0xFD;
if(P1==0xED)
{
            *(ptr+i)='4';
            dat('4');
            delay(200);
            cmd(0x06);

            i++;
}
else if(P1==0xDD)
{
```

```
        *(ptr+i)='5';
        dat('5');
        delay(200);
        cmd(0x06);

        i++;
}
else if(P1==0xBD)
{
        *(ptr+i)='6';
        dat('6');
        delay(200);
        cmd(0x06);

        i++;
}
else if (P1==0x7D)
{
        *(ptr+i)='*';
        dat('*');
        delay(200);
        cmd(0x06);

        i++;
}


P1=0xFB;
if(P1==0xEB)
```

```
{
        *(ptr+i)='1';
        dat('1');
        delay(200);
        cmd(0x06);

        i++;
}
else if(P1==0xDB)
{
        *(ptr+i)='2';
        dat('2');
        delay(200);
        cmd(0x06);

        i++;
}
else if(P1==0xBB)
{
        *(ptr+i)='3';
        dat('3');
        delay(200);
        cmd(0x06);

        i++;
}
else if(P1==0x7B)
{
        *(ptr+i)='-';
```

```
        dat('-');
        delay(200);
        cmd(0x06);

        i++;
}



P1=0xF7;
if(P1==0xE7)
{
        *(ptr+i)='C';
        dat('C');
        delay(200);
        cmd(0x06);

        i++;

}
else if(P1==0xD7)
{
        *(ptr+i)='0';
        dat('0');
        delay(200);
        cmd(0x06);

        i++;
}
```

```
                else if(P1==0xB7)
                {
                        *(ptr+i)='=';
                        dat('=');
                        delay(200);
                        cmd(0x06);

                        i++;
                }
                else if(P1==0x77)
                {
                        *(ptr+i)='+';
                        dat('+');
                        delay(200);
                        cmd(0x06);

                        i++;
                }
        }

while(i==4)
{

if ((strcmp(pass, pass2)) == 0)
{
        cmd(0xC0);
        display("Correct");
        IN1 = 1;
        IN2 = 0;
```

```
        delay(100);
}
else
{
        cmd(0xC0);
        display("Incorrect");
        IN1 = 0;
        IN2 = 0;
        delay(100);
}
}
}
        }
```

After create hex file, go to proteous and double click the µ- Controller AT89651

Change

Check Frequency: 11.0592

Next In Program folder …insert the hex file properly.

Then click ok.

Run the Simulation.

Type your password in keypad.

If run the motor you know your project is correct.