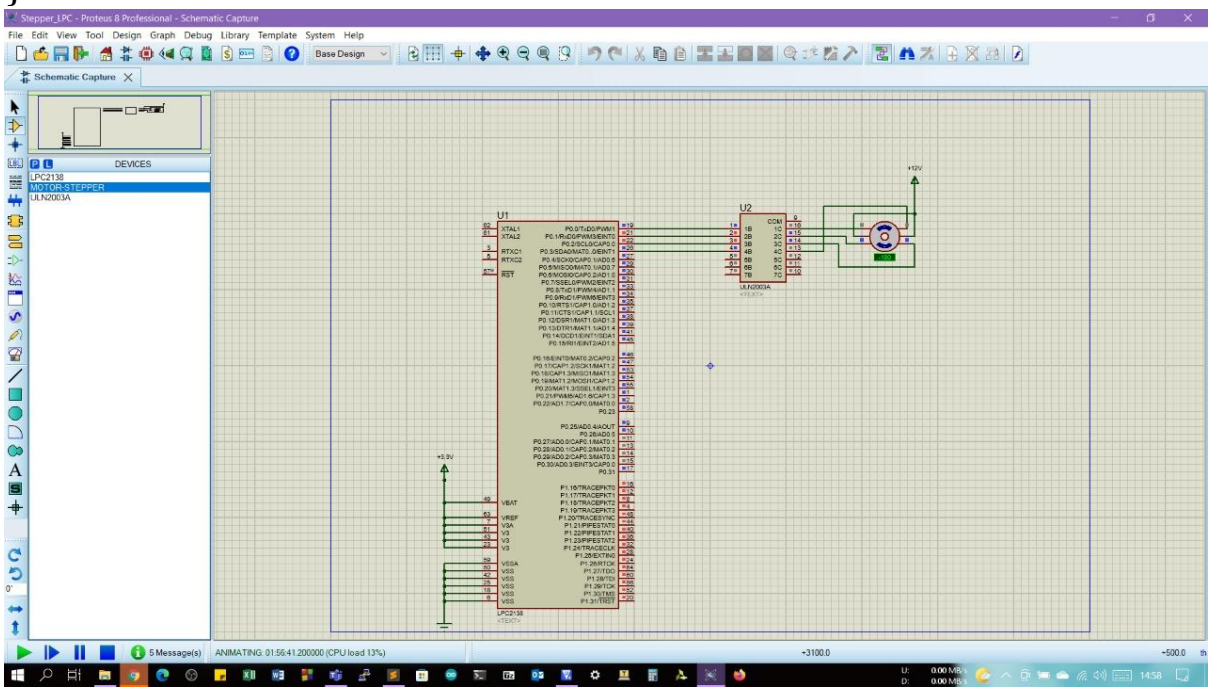
NAME: - MALLIK THANU NAIK

REG.NO :- 211039038

STEPPER MOTOR

```
#include <LPC213X.h>

void delay();
int i;
unsigned char dir_fl;

int main()
{
		IODIR0 = 0XFFFFFFFF;
		dir_fl = 0;

		while(1)
		{

				IOSET0 = 0x3;
				delay();
				IOCLR0 = 0x3;

				IOSET0 = 0x6;
				delay();
				IOCLR0 = 0x6;

				IOSET0 = 0xC;
				delay();
				IOCLR0 = 0xC;

				IOSET0 = 0x9;
				delay();
				IOCLR0 = 0x9;


		}
```

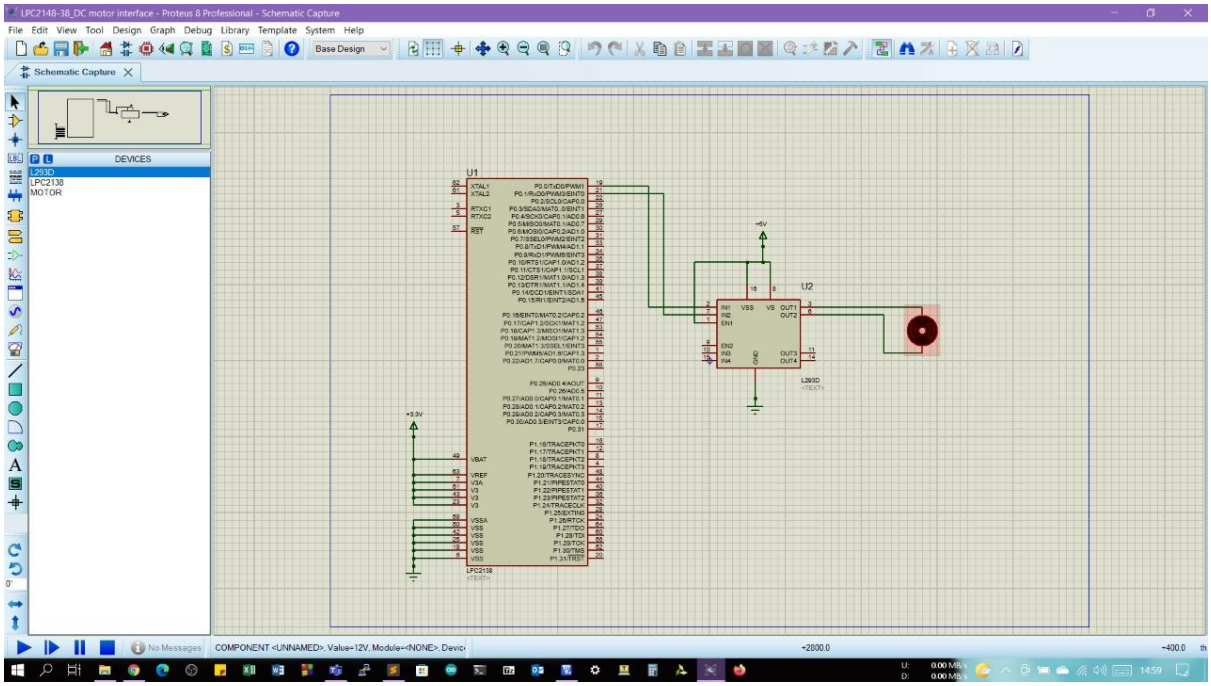
```
}

void delay()
{
        for(i=0; i<=5000;i++)
                for(i=0; i<=150000; i++);

}
```



DC MOTOR

```
#include<LPC213x.h>

#define bit(x) (1<<x)
#define delay for(i=0;i<=60000;i++)

unsigned int i;

void main()
{
IO0DIR=0xf; //Declaring as a output
IO0PIN=0; //Clear all IO Pins in P0
VPBDIV=0x01; //PCLK = 60MHz
```

```
while(1)
{
/Forward/
IO0SET=bit(0); //IN1 = 1
IO0CLR=bit(1); //IN2 = 0
delay;
delay;

/Off/
IO0CLR=bit(0)|bit(1); //IN1 = IN2 = 0
delay;
delay;

/Reverse/
IO0SET=bit(1); //IN2 = 1
IO0CLR=bit(0); //IN0 = 1
delay;
delay;

/Off/
IO0CLR=bit(0)|bit(1); //IN1 = IN2 = 0
delay;
delay;
}
}
```


LPC2148-38_DC motor interface - Proteus 8 Professional - Schematic Capture
File Edit View Tool Design Graph Debug Library Template System Help
Schematic Capture
DEVICES
L293D
LPC2138
MOTOR
U1
U2
+9V
+3.3V
LPC2138
L293D
COMPONENT <UNNAMED>, Value=12V, Module=<NONE>, Devic
+2800.0
+400.0