

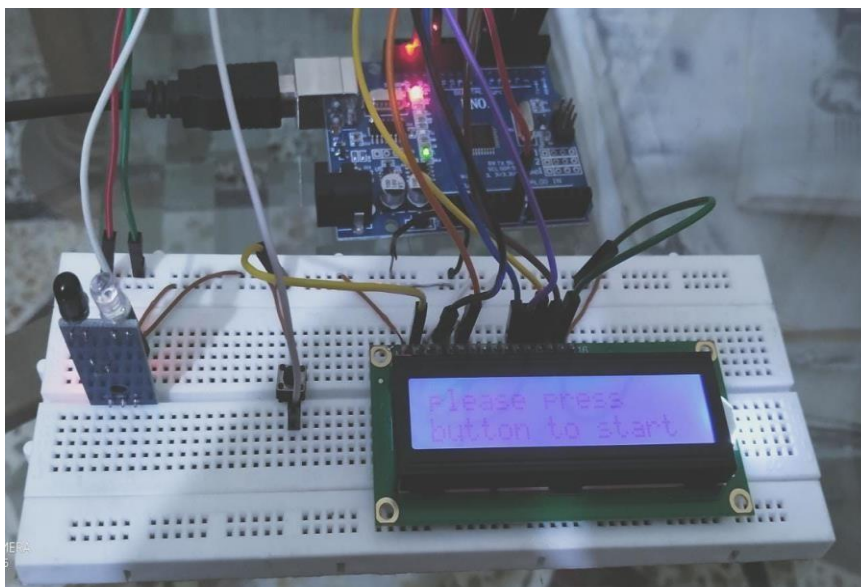
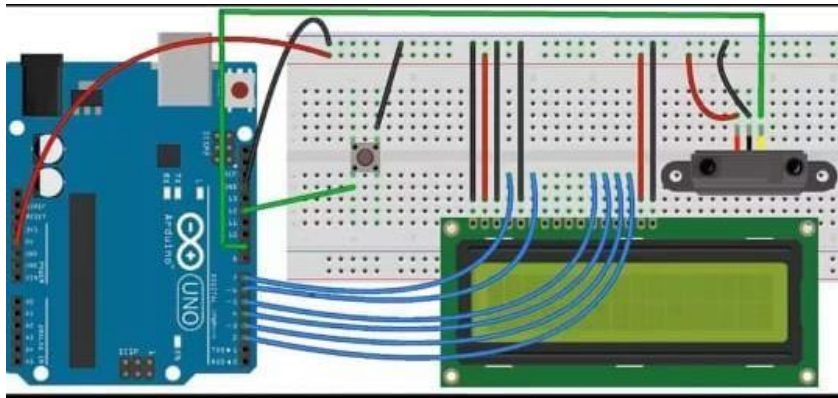
PROJECT DIGITAL TACHOMETER USING IR SENSOR, **ARDUINO AND LCD**

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CIRCUIT DIAGRAM:



CODE:

```
#include <LiquidCrystal.h>
```

```
LiquidCrystal lcd(7,6,5,4,3,2);
```

```
int sensor=9; int start=12; int
```

```
delay1()
```

```
{ int
```

```
i,j;
```

```
    unsigned int count=0;
```

```
for(i=0;i<800;i++)
```

```
{
```

```
    for(j=0;j<800;j++)
```

```
    {
```

```
        if(digitalRead(sensor))
```

```
        {
```

```
            count++;
```

```
while(digitalRead(sensor));
```

```
    }
```

```
    }
```

```
}
```

```
return count;
```

```
}
```

```
void setup() {
```

```
    // put your setup code here, to run once:
```

```
pinMode(sensor,INPUT);
```

```
pinMode(start,INPUT);
```

```
pinMode(2,OUTPUT); lcd.begin(16,2);
```

```
lcd.print("Measure RPM"); delay(2000);
```

```
digitalWrite(start,HIGH);
```

```
}
```

```
void loop() {
```

```
    // put your main code here, to run repeatedly:
```

```
    unsigned int time=0,RPM=0;
```

```
    lcd.clear(); lcd.print("please
```

```
    press"); lcd.setCursor(0,1);
```

```
    lcd.print("button to start");
```

```
    while(digitalRead(start));
```

```
    lcd.clear();
```

```
    lcd.print("reading RPM---");
```

```
    time=delay1();
```

```
    lcd.clear(); lcd.print("please
```

```
    wait...");
```

```
    RPM=time;
```

```
    delay(2000);
```

```
    lcd.clear();
```

```
    lcd.print("RPM=");
```

```
    lcd.print(RPM); delay(6000);
```

```
}
```