Somaiya Vidyavihar University
K. J. Somaiya College of Engineering, Mumbai -77
(A Constituent College of Somaiya Vidyavihar University)

F Y B Tech SEM II 2021-22
Engineering Exploration Lab Course

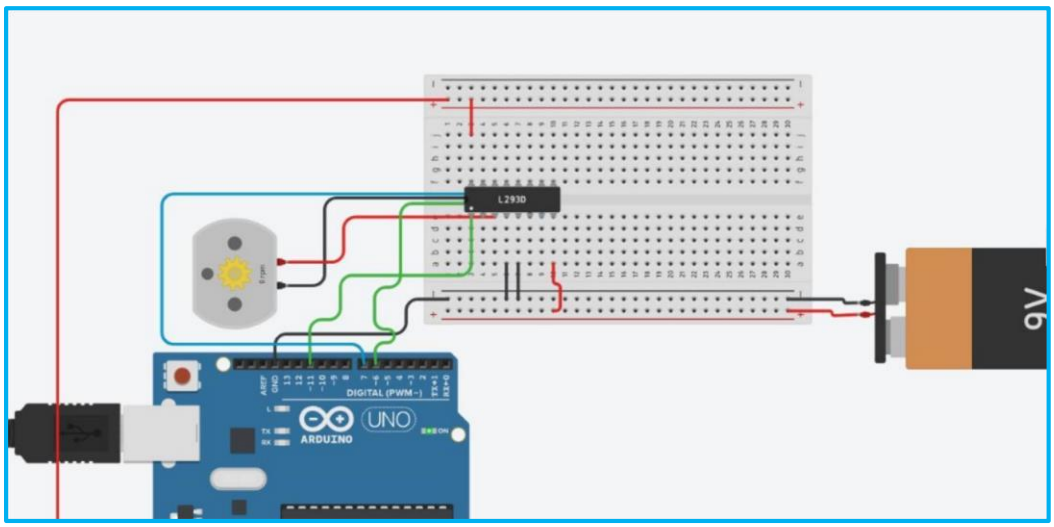
Assignment No.:8

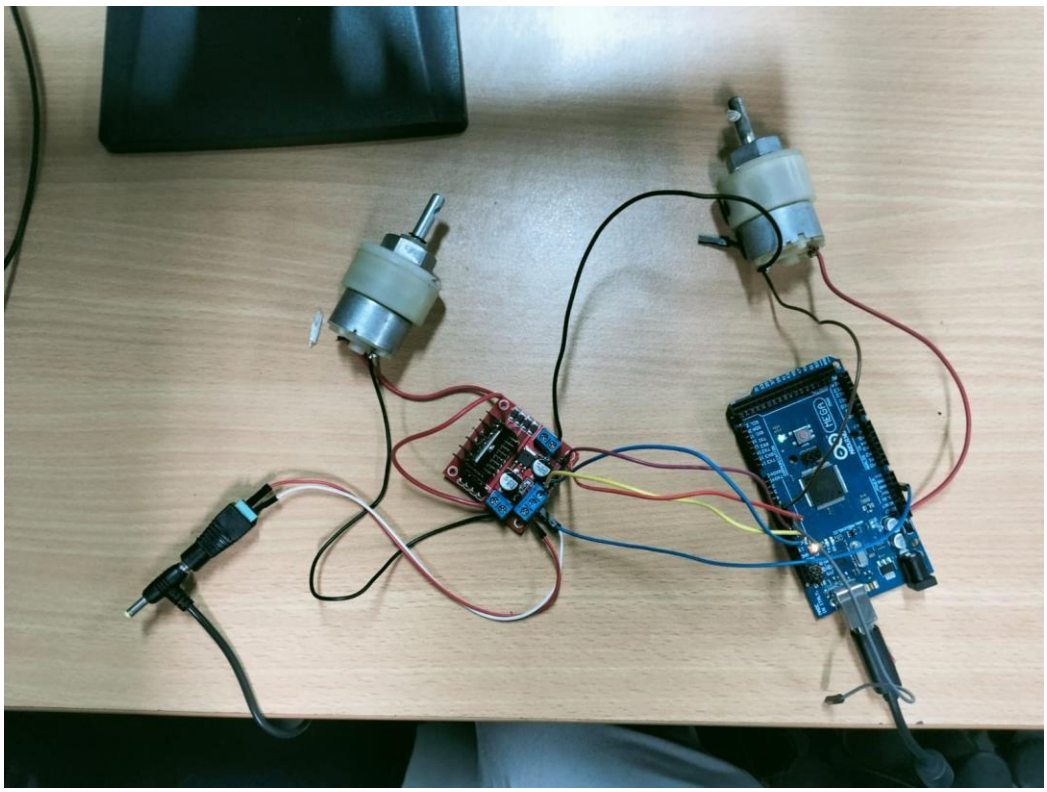
Title: DC Motor Interfacing with Arduino

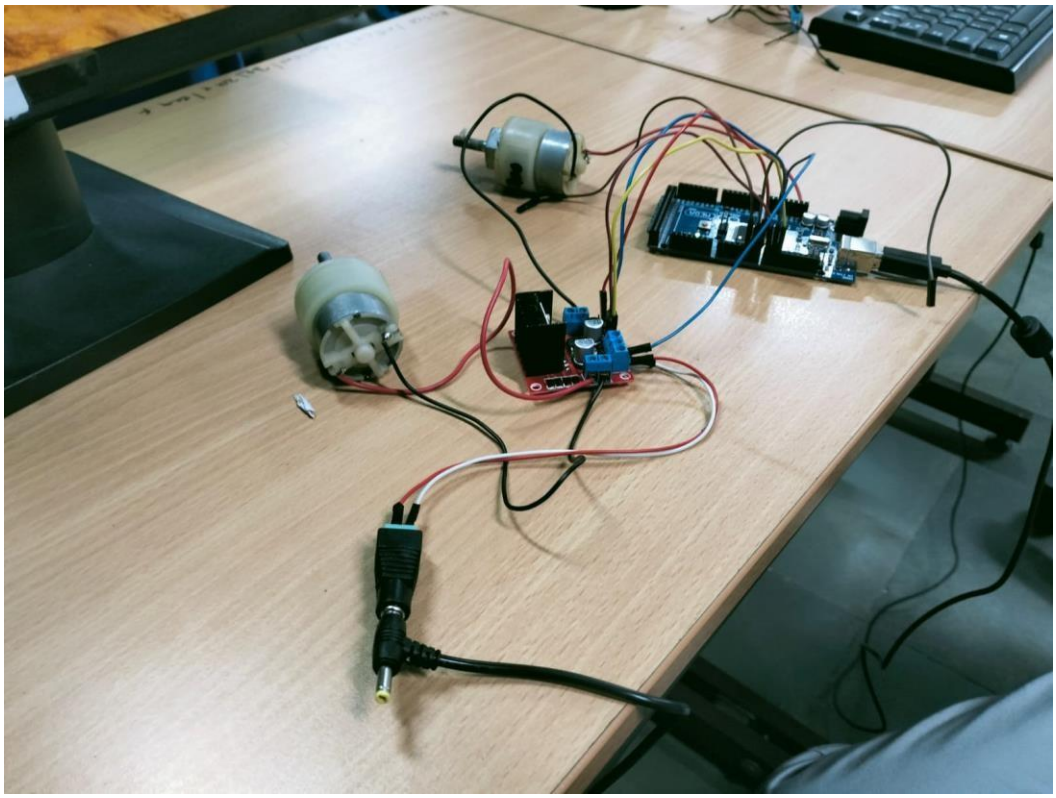
Name: Meet gala
Roll No: 16010121051
Branch: Comps
Batch: A3

D C Motor Interfacing with Arduino

Circuit Diagram







Implementation Details (Code)

```
int enA = 10;
int in1 = 9; int
in2 = 8; int
enB = 5; int
in3 = 7; int in4
= 6; void
setup()
{
pinMode(enA, OUTPUT);
pinMode(enB, OUTPUT);
pinMode(in1, OUTPUT); pinMode(in2,
OUTPUT); pinMode(in3, OUTPUT);
pinMode(in4, OUTPUT);
}
void demoOne()
{ digitalWrite(in1,
HIGH); digitalWrite(in2,
LOW);
analogWrite(enA, 200);
digitalWrite(in3, HIGH);
digitalWrite(in4, LOW);
analogWrite(enB, 200);
delay(2000);
digitalWrite(in1, LOW);
digitalWrite(in2, HIGH);
digitalWrite(in3, LOW);
digitalWrite(in4, HIGH);
delay(2000);
digitalWrite(in1, LOW);
digitalWrite(in2, LOW);
digitalWrite(in3, LOW);
digitalWrite(in4, LOW);} void
demoTwo()
{
digitalWrite(in1, LOW);
digitalWrite(in2, HIGH);
digitalWrite(in3, LOW);
digitalWrite(in4, HIGH); for
(int i = 0; i < 256; i++) {
analogWrite(enA, i);
analogWrite(enB, i);
delay(20);
}
for (int i = 255; i > 0; --i)  {
```

```
analogWrite(enA, i);
analogWrite(enB, i);
delay(20);
}
digitalWrite(in1, LOW); digitalWrite(in2,
LOW); digitalWrite(in3, LOW);
digitalWrite(in4, LOW);
}  void
loop()
{
demoOne();
delay(1000);
demoTwo();
delay(1000);
}
```