DC Motor Control..

**ThinketCard link :**

<https://www.tinkercad.com/things/iBLVIqSHIrD-dc-motor-control-/editel>

**Code :**

#define enA 11

#define in1 9

#define in2 10

void setup() {

Serial.begin(9600);

pinMode(enA, OUTPUT);

pinMode(in1, OUTPUT);

pinMode(in2, OUTPUT);

digitalWrite(in1, LOW);

digitalWrite(in2, HIGH);

setPwmFrequency(9, 1);

setPwmFrequency(10, 1);

setPwmFrequency(11, 1);

}

void loop() {

int potValue = analogRead(A0);

Serial.println(potValue);

int pwmOutput = map(potValue, 0, 1023, 0 , 255);

analogWrite(enA, pwmOutput);

delay(20);

}

void setPwmFrequency(int pin, int divisor) {

byte mode;

if(pin == 5 || pin == 6 || pin == 9 || pin == 10) {

switch(divisor) {

case 1: mode = 0x01; break;

case 8: mode = 0x02; break;

case 64: mode = 0x03; break;

case 256: mode = 0x04; break;

case 1024: mode = 0x05; break;

default: return;

}

if(pin == 5 || pin == 6) {

TCCR0B = TCCR0B & 0b11111000 | mode;

} else {

TCCR1B = TCCR1B & 0b11111000 | mode;

}

} else if(pin == 3 || pin == 11) {

switch(divisor) {

case 1: mode = 0x01; break;

case 8: mode = 0x02; break;

case 32: mode = 0x03; break;

case 64: mode = 0x04; break;

case 128: mode = 0x05; break;

case 256: mode = 0x06; break;

case 1024: mode = 0x07; break;

default: return;

}

TCCR2B = TCCR2B & 0b11111000 | mode;

}

}

**Connection :**

