

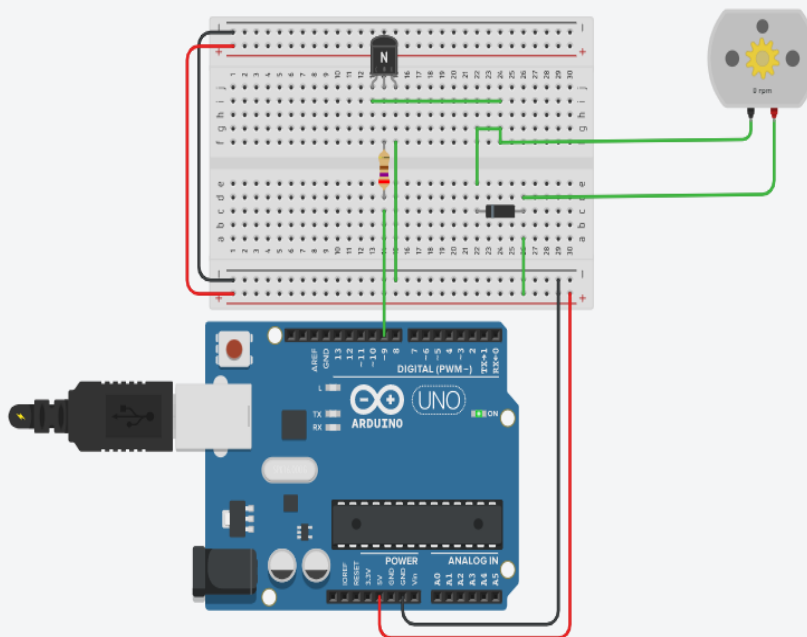
# STEPS DC MOTOR

- 1- open a website [THINKERCAD.com](https://www.thinkercad.com)
- 2- Choose and open a new design
- 3- The first thing you will select the Arduino board and Breadboard
- 4- Select the DC motor and put it near from breadboard
- 5- Select NPN Transistor (BJT) you will put it in breadboard J (13, 14 ,15)
- 6- Select Diode I put it in breadboard C (23, 27 ) Crosswise
- 7- Select RESISTOR the resistance will be  $270\ \Omega$
- 8- So now connection from A26 to PLUS
- 9- Then the plus motor will connection to the same place
- 10-From COLLECTOR will take connection
- 11-Then I will take MINUS MOTOR and connection with collector
- 12-connection the anode to the minus motor
- 13-choose any bin near from resistor

## THE CODING

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```
int motorcontrol = 9;  
  
void setup()  
{ pinMode( motorcontrol , OUTPUT);}  
  
void loop()  
{ digitalWrite(motorcontrol, HIGH);  
  
  delay(4000);  
  
  digitalWrite(motorcontrol, LOW);  
  
  delay(2000); }
```



# Servo motor

## THE CODING

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```
#include <Servo.h>

Servo myservo;

int pos = 0;

void setup() {

  myservo.attach(9); }

void loop() {

  for (pos = 0; pos <= 180; pos += 1) {

    myservo.write(pos);

    delay(15);

    for (pos = 180; pos >= 0; pos -= 1) {

      myservo.write(pos);

      delay(15); }

  }
```

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