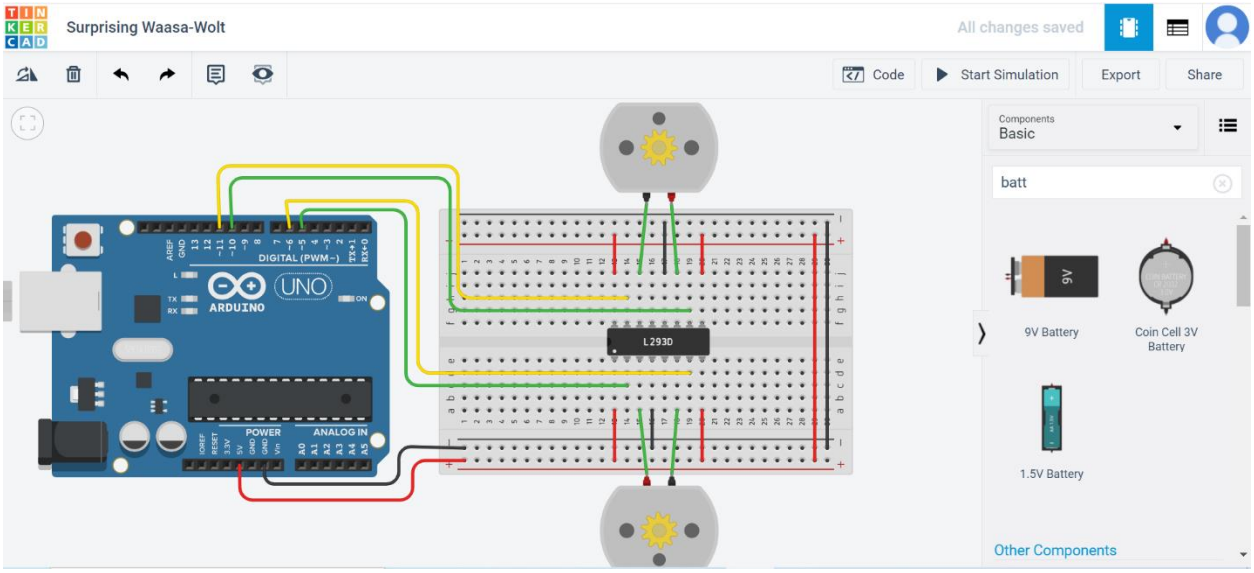


```
//The bot is currently facing the left of the screen
//Motor1 becomes the left wheel
//Motor2 becomes the right wheel

int Motor1_Pin1 = 5; //Motor1 is at the bottom of the screen
int Motor1_Pin2 = 6;
int Motor2_Pin1 = 10; //Motor2 is at the top of the screen
int Motor2_Pin2 = 11;
char choice;

void setup()
{
  pinMode(Motor1_Pin1, OUTPUT);
  pinMode(Motor1_Pin2, OUTPUT);
```

```
  pinMode(Motor2_Pin1, OUTPUT);
  pinMode(Motor2_Pin2, OUTPUT);
  Serial.begin(9600);
  Serial.println("Enter: ");
  Serial.println(" 'F' for Forward");
  Serial.println(" 'B' for Backward");
  Serial.println(" 'R' for Turn Right");
  Serial.println(" 'L' for Turn Left");
  Serial.println(" 'r' for Rotate Clockwise");
  Serial.println(" 'l' for Rotate Anti-clcokwise");
}

void forward() //function for moving the bot forward
{
  digitalWrite(Motor1_Pin1, LOW);
  digitalWrite(Motor1_Pin2, HIGH);
  digitalWrite(Motor2_Pin1, HIGH);
  digitalWrite(Motor2_Pin2, LOW);
}

void backward() //fucntion for moving the bot backward
{
```

```
  digitalWrite(Motor1_Pin1, HIGH);
  digitalWrite(Motor1_Pin2, LOW);
  digitalWrite(Motor2_Pin1, LOW);
  digitalWrite(Motor2_Pin2, HIGH);
}

void rotate_clockwise() //function for rotating the bot clcokwise
{
  digitalWrite(Motor1_Pin1, LOW);
  digitalWrite(Motor1_Pin2, HIGH);
  digitalWrite(Motor2_Pin1, LOW);
  digitalWrite(Motor2_Pin2, HIGH);
}

void rotate_anticlockwise() //function for rotating the bot anticlockwise
{
  digitalWrite(Motor1_Pin1, HIGH);
  digitalWrite(Motor1_Pin2, LOW);
  digitalWrite(Motor2_Pin1, HIGH);
  digitalWrite(Motor2_Pin2, LOW);
}
```

```
void turn_left() //function for turning the bot to thte left
{
  digitalWrite(Motor1_Pin1, LOW);
  analogWrite(Motor1_Pin2, 127);
  analogWrite(Motor2_Pin1, 255);
  digitalWrite(Motor2_Pin2, LOW);
}

void turn_right() //function for turning the bot to the right
{
  digitalWrite(Motor1_Pin1, LOW);
  analogWrite(Motor1_Pin2, 255);
  analogWrite(Motor2_Pin1, 127);
  digitalWrite(Motor2_Pin2, LOW);
}

void loop()
{
 if(Serial.available()>0)
 {
   choice = Serial.read(); //taking the input command for the bot to
move from the user
```

```
  switch(choice) //calling a function as per the user's input
  {
    case 'F': forward();
              break;
    case 'B': backward();
              break;
    case 'R': turn_right();
              break;
    case 'L': turn_left();
              break;
    case 'r': rotate_clockwise();
              break;
    case 'l': rotate_anticlockwise();
              break;
    default: Serial.println("Enter a valid character");
  }
 }
  delay(1000);
}
```