**Arduino – Smart Car Kit**

**Aishwarya V**

**23BRS1049**

**Q. Basic Movements:**

1. **Move Forward**
2. **Move Backward**
3. **Left Turn**
4. **Right Turn**
5. **Accelerate Speed**
6. **Decelerate Speed**

**[GITHUB LINK](https://github.com/aishwaryav2005/arduino-smart-car-kit)**

**Source Code:**

#define ENA 5

#define ENB 6

#define IN1 7

#define IN2 8

#define IN3 9

#define IN4 11

void right() {

digitalWrite(ENA, HIGH);

digitalWrite(ENB, HIGH);

digitalWrite(IN1, HIGH);

digitalWrite(IN2, LOW);

digitalWrite(IN3, HIGH);

digitalWrite(IN4, LOW);

Serial.println("Forward");

}

void left() {

digitalWrite(ENA, HIGH);

digitalWrite(ENB, HIGH);

digitalWrite(IN1, LOW);

digitalWrite(IN2, HIGH);

digitalWrite(IN3, LOW);

digitalWrite(IN4, HIGH);

}

void forward() {

digitalWrite(ENA, HIGH);

digitalWrite(ENB, HIGH);

digitalWrite(IN1, LOW);

digitalWrite(IN2, HIGH);

digitalWrite(IN3, HIGH);

digitalWrite(IN4, LOW);

}

void back() {

digitalWrite(ENA, HIGH);

digitalWrite(ENB, HIGH);

digitalWrite(IN1, HIGH);

digitalWrite(IN2, LOW);

digitalWrite(IN3, LOW);

digitalWrite(IN4, HIGH);

}

void stopMotors() {

digitalWrite(ENA, LOW);

digitalWrite(ENB, LOW);

digitalWrite(IN1, LOW);

digitalWrite(IN2, LOW);

digitalWrite(IN3, LOW);

digitalWrite(IN4, LOW);

Serial.println("Stop");

}

void setup() {

Serial.begin(9600);

pinMode(IN1, OUTPUT);

pinMode(IN2, OUTPUT);

pinMode(IN3, OUTPUT);

pinMode(IN4, OUTPUT);

pinMode(ENA, OUTPUT);

pinMode(ENB, OUTPUT);

stopMotors();

}

void loop() {

back();

delay(800);

forward();

delay(800);

right();

delay(450);

forward();

delay(800);

left();

delay(500);

forward();

delay(800);

stopMotors();

delay(10000);

}