

SMART ELECTRIC VEHICLES MINOR

Experiment 4

AIM: To interface Motor using relay with ESP32

OBJECTIVE: To write a code in Arduino IDE and interface motor using relay

THEORY: An electric motor is an electrical machine that converts electrical energy into mechanical energy. Most electric motors operate through the interaction between the motor's magnetic field and electric current in a wire winding to generate force in the form of torque applied on the motor's shaft.

SIMULATION CODE:

```
Int relayInput = 2;
Void setup() {
  pinMode(relayInput , OUTPUT);
}
Void loop() {
  digitalWrite(relayInput, HIGH);
  delay(3000);
  digitalWrite(relayInput, LOW);
  delay(4000);
}
```

SIMULATION RESULT:



```
4_lab_interface_motor_using_relay
int relayInput = 2;
void setup() {
  pinMode(relayInput, OUTPUT);
}
void loop() {
  digitalWrite(relayInput, HIGH);
  delay(3000);
  digitalWrite(relayInput, LOW);
  delay(4000);
}
```

CONCLUSION: After performing this experiment we were able control motor using relay with ESP32

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