

PRACTICAL 10

Write a program to use Relay to control electrical equipment.

The main concept behind this project is to understand the working and use of a relay and also control a relay using Raspberry Pi.

There is nothing special going in the project. All you need to do is to control the GPIO pins connected to the Relay Module. If the GPIO Pin is made HIGH, the corresponding load will be switched ON.

To turn OFF the load, make the GPIO pin LOW.

Code.

```
import RPi.GPIO as GPIO
import time

in1 = 16
in2 = 18

GPIO.setmode(GPIO.BOARD)
GPIO.setup(in1, GPIO.OUT)
GPIO.setup(in2, GPIO.OUT)

GPIO.output(in1, False)
GPIO.output(in2, False)
try:
    while True:
        for x in range(5):
            GPIO.output(in1, True)
            time.sleep(0.1)
            GPIO.output(in1, False)
            GPIO.output(in2, True)
            time.sleep(0.1)
            GPIO.output(in2, False)

            GPIO.output(in1, True)
            GPIO.output(in2, True)
            for x in range(4):
                GPIO.output(in1, True)
                time.sleep(0.05)
                GPIO.output(in1, False)
                time.sleep(0.05)
                GPIO.output(in1, True)
                for x in range(4):
                    GPIO.output(in2, True)
                    time.sleep(0.05)
                    GPIO.output(in2, False)
                    time.sleep(0.05)
                    GPIO.output(in2, True)
```

```
except
KeyboardInterrupt:
    GPIO.cleanup()
```