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#include <EEPROM.h>
#include <SoftwareSerial.h>
SoftwareSerial BT_Serial(2, 3); // RX, TX

#define Relay1 4 // Load1 Pin Out
#define Relay2 5 // Load2 Pin Out
#define Relay3 6 // Load3 Pin Out
#define Relay4 7 // Load4 Pin Out

char bt_data; // variable to receive data from the serial port
int load1, load2, load3, load4, power;

void setup(){
  Serial.begin(9600);
  BT_Serial.begin(9600);

  pinMode(Relay1, OUTPUT); digitalWrite(Relay1, 1);
  pinMode(Relay2, OUTPUT); digitalWrite(Relay2, 1);
  pinMode(Relay3, OUTPUT); digitalWrite(Relay3, 1);
  pinMode(Relay4, OUTPUT); digitalWrite(Relay4, 1);

  load1 = EEPROM.read(1);
  load2 = EEPROM.read(2);
  load3 = EEPROM.read(3);
  load4 = EEPROM.read(4);

  power = EEPROM.read(5);
  delay(500);
}

void loop() {
  if(BT_Serial.available()>0){bt_data = BT_Serial.read();}

  if(bt_data == 'A'){load1=0;EEPROM.write(1, load1);}
  if(bt_data == 'a'){load1=1;EEPROM.write(1, load1);}

  if(bt_data == 'B'){load2=0;EEPROM.write(2, load2);}
  if(bt_data == 'b'){load2=1;EEPROM.write(2, load2);}

  if(bt_data == 'C'){load3=0;EEPROM.write(3, load3);}
  if(bt_data == 'c'){load3=1;EEPROM.write(3, load3);}

  if(bt_data == 'D'){load4=0;EEPROM.write(4, load4);}
  if(bt_data == 'd'){load4=1;EEPROM.write(4, load4);}

  if(bt_data == 'E'){power=0;EEPROM.write(5, power);}
  if(bt_data == 'e'){power=1;EEPROM.write(5, power);}

  bt_data = '0';

  if(power==1){
    digitalWrite(Relay1, 1);
    digitalWrite(Relay2, 1);
    digitalWrite(Relay3, 1);
    digitalWrite(Relay4, 1);
  }else{
    digitalWrite(Relay1, load1);
    digitalWrite(Relay2, load2);
    digitalWrite(Relay3, load3);

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digitalWrite(Relay4, load4);  
}
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BT_Serial.print(power); //send distance to MIT App  
BT_Serial.print(";");  
BT_Serial.print(load1); //send distance to MIT App  
BT_Serial.print(";");  
BT_Serial.print(load2); //send distance to MIT App  
BT_Serial.print(";");  
BT_Serial.print(load3); //send distance to MIT App  
BT_Serial.print(";");  
BT_Serial.print(load4); //send distance to MIT App  
BT_Serial.println(";");
```

```
delay(500);  
}
```