

Percobaan 1

//MASTER

#define DS1 2

#define DS2 3

#define DS3 4

#define DS4 5

#define DS5 6

#define DS6 7

#define DS7 8

#define DS8 9

bool b1,b2,b3,b4,b5,b6,b7,b8;

void setup()

{

Serial.begin(9600);

pinMode(DS1, INPUT_PULLUP);

pinMode(DS2, INPUT_PULLUP);

pinMode(DS3, INPUT_PULLUP);

pinMode(DS4, INPUT_PULLUP);

pinMode(DS5, INPUT_PULLUP);

pinMode(DS6, INPUT_PULLUP);

pinMode(DS7, INPUT_PULLUP);

pinMode(DS8, INPUT_PULLUP);

}

void loop()

{

int b8 = digitalRead(DS8);

int b7 = digitalRead(DS7);

int b6 = digitalRead(DS6);

int b5 = digitalRead(DS5);

```
int b4 = digitalRead(DS4);
int b3 = digitalRead(DS3);
int b2 = digitalRead(DS2);
int b1 = digitalRead(DS1);
// Hidupkan LED sesuai dengan tombol yang ditekan
if (b8 == LOW)
{
  Serial.write('8');
}
else if (b7 == LOW)
{
  Serial.write('7');
}
else if (b6 == LOW)
{
  Serial.write('6');
}
else if (b5 == LOW)
{
  Serial.write('5');
}
else if (b4 == LOW)
{
  Serial.write('4');
}
else if (b3 == LOW)
{
  Serial.write('3');
}
```

```
else if (b2 == LOW)
{
  Serial.write('2');
}
else if (b1 == LOW)
{
  Serial.write('1');
}
delay(20);
}
//SLAVE
int led[] = {2, 3, 4, 5, 6, 7, 8, 9};
char message;
void setup()
{
  Serial.begin(9600);
  for (int i = 0; i < 8; i++)
  {
    pinMode(led[i], OUTPUT);
  }
}
void loop()
{
  if (Serial.available())
  {
    message = Serial.read();
    if (message == '1')
    {
      digitalWrite(led[0], 1);
```

```
}  
else if (message == '2')  
{  
  digitalWrite(led[1], 1);  
}  
else if (message == '3')  
{  
  digitalWrite(led[2], 1);  
}  
else if (message == '4')  
{  
  digitalWrite(led[3], 1);  
}  
else if (message == '5')  
{  
  digitalWrite(led[4], 1);  
}  
else if (message == '6')  
{  
  digitalWrite(led[5], 1);  
}  
else if (message == '7')  
{  
  digitalWrite(led[6], 1);  
}  
else if (message == '8')  
{  
  digitalWrite(led[7], 1);  
}
```

```
}  
delay(20);  
digitalWrite(led[0], 0);  
digitalWrite(led[1], 0);  
digitalWrite(led[2], 0);  
digitalWrite(led[3], 0);  
digitalWrite(led[4], 0);  
digitalWrite(led[5], 0);  
digitalWrite(led[6], 0);  
digitalWrite(led[7], 0);  
}
```