BIT MATTEMATIKK

```
const int dataPin = 6;
const int clockPin = 7;
const int latchPin = 8;
byte ledMap = 0b11111111;

void setup() {
  // put your setup code here, to run once:
  pinMode(dataPin, OUTPUT);
  pinMode(clockPin, OUTPUT);
  pinMode(latchPin, OUTPUT);

  Serial.begin(9600);
  shiftWrite(0x00);
  Serial.println("Enter a number between 0-255");
}
void loop() {
  if(Serial.available())
  {
    int inputVal = Serial.parseInt();

    if(inputVal > 255)
    {
```

```
  Serial.println("Uh oh, try again");
  Serial.println("Enter a number between 0-255");
  return;
}

Serial.print("DECIMAL: ");
Serial.println(inputVal);
Serial.print("BINARY: ");
Serial.println(inputVal, BIN);
Serial.println();

Serial.print("AND result: ");
Serial.println(ledMap & inputVal, BIN);
shiftWrite(ledMap & inputVal);
delay(delayTime);

Serial.print("OR  result: ");
Serial.println(ledMap | inputVal, BIN);
shiftWrite(ledMap | inputVal);
delay(delayTime);

Serial.print("XOR result: ");
Serial.println(ledMap ^ inputVal, BIN);
shiftWrite(ledMap ^ inputVal);
delay(delayTime);
```

```
    Serial.println();
    Serial.println("Enter a number between 0-255");
  }
}
void shiftWrite(byte value)
{
  digitalWrite(latchPin, LOW);
  shiftOut(dataPin, clockPin, MSBFIRST, value);
  digitalWrite(latchPin, HIGH);
}
```