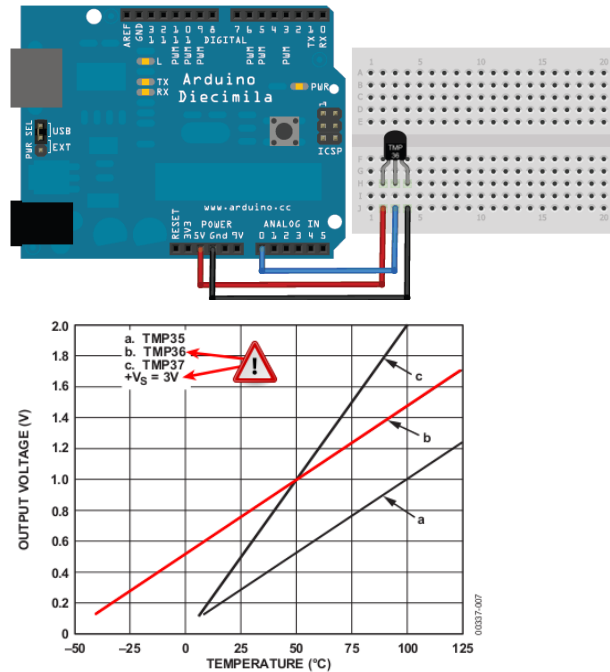


Partie 1 :

1. TMP36



```

int pinTmp36 = A0;

int led1 = 3;
int led2 = 4;
int led3 = 5;
int led4 = 6;
int led5 = 7;
int led6 = 8;

void setup() {
  pinMode(led1, OUTPUT);
  pinMode(led2, OUTPUT);
  pinMode(led3, OUTPUT);
  pinMode(led4, OUTPUT);
  pinMode(led5, OUTPUT);
  pinMode(led6, OUTPUT);
}

void loop() {
  int val = analogRead(pinTmp36);
  float tension = val * 5.0;
  tension /= 1024.0;
  int tmp = ((tension * 1000) - 500) / 10; //voir datasheet Tmp36

  digitalWrite(led1, LOW);
  digitalWrite(led2, LOW);
  digitalWrite(led3, LOW);
  digitalWrite(led4, LOW);
  digitalWrite(led5, LOW);
  digitalWrite(led6, LOW);

  if (tmp <= 10 )           digitalWrite(led1, HIGH);
  if ((tmp > 10 ) && (tmp <= 20)) digitalWrite(led2, HIGH);

```

```
if ((tmp > 20 )&&(tmp <= 30)) digitalWrite(led3, HIGH);
if ((tmp > 30 )&&(tmp <= 40)) digitalWrite(led4, HIGH);
if (tmp >= 40 )
    digitalWrite(led5, HIGH);

delay(500);
}
```

2. Affichage Binaire

```
int pinTmp36 = A0;
int tab[6]={0,0,0,0,0,0};

void setup(){
  pinMode(3, OUTPUT);
  pinMode(4, OUTPUT);
  pinMode(5, OUTPUT);
  pinMode(6, OUTPUT);
  pinMode(7, OUTPUT);
  pinMode(8, OUTPUT);
}

void loop(){
  int val = analogRead(pinTmp36);
  float tension = val * 5.0;
  tension /= 1024.0;
  int tmp = ((tension * 1000) - 500) / 10; //voir datasheet Tmp36
  tmp = 30;
  for(int i=0;i<6;i++){
    if (tmp % 2 == 1)
      tab[i]=1;
    else
      tab[i]=0;
    tmp = tmp / 2;
  }

  for(int i=0;i<6;i++){
    if (tab[i] == 1 ) digitalWrite(i+3, HIGH);
    else
      digitalWrite(i+3, LOW);
  }

  delay(500);
}
```

Partie 2 :

Utilisez la logique ... !