**Task 2b**

Measure temperature

Pause 1

START

Turn on Green LED

Yes

Is temp between 18 -24?

No

Flash yellow LED every 0.5s

Yes

Is temp below 18?

No

Flash red LED every 0.25s

Is temp above 24?

Yes

No

END

START

Define pins

Configure pins

Define arrays

Update plot

Update array

Read temp

While

Read temp

Pause 1

Create live plot

Read temp

Read temp

**Task 2h**

False

True

Yes

Turn on green LED

END

Is temp >24?

Is temp <18?

Is temp in 18-24?

No

No

No

Yes

Yes

Flash red LED 0.25s

Flash yellow LED 0.5s

While

False

True

START

Define pins

Configure pins

Define arrays

**Task 3a**

True

False

While

Predict temp

Calculate rate of change

Update array

Read temp

Pause 1

Yes

Yes

Flash red LED 0.25s

Flash yellow LED 0.5s

Turn on green LED

Yes

Is RoC <= 0.067?

Is RoC <-0.067?

No

No

Is RoC >0.067?

END