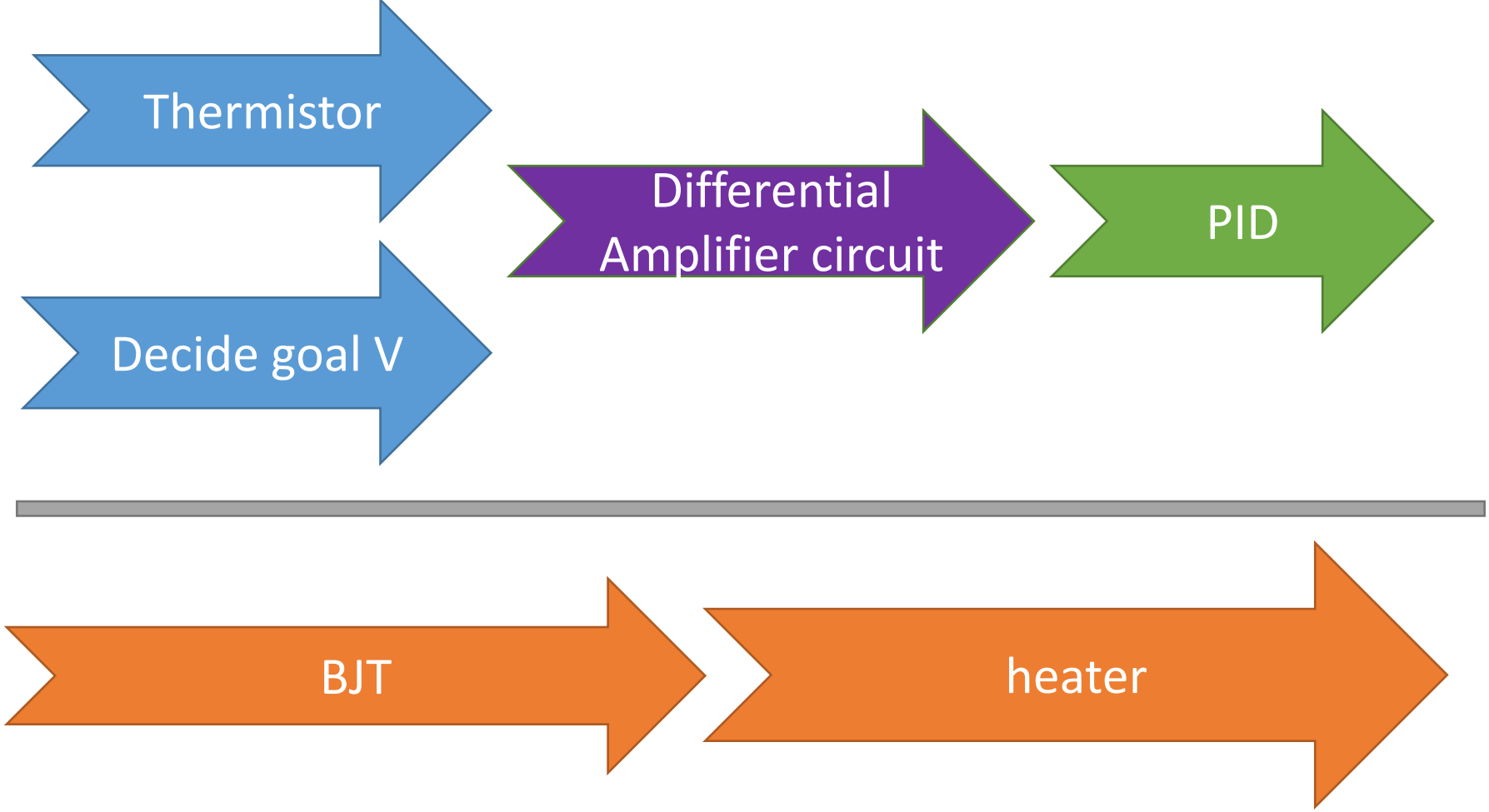
Group 02
HW 14
2020/6/9

| ID | Name | Your works | Time | Score | TA |
|---|---|---|---|---|---|
| 107601025 | 簡邵偉 | Final project | 10H | 90 | |
| 108202016 | 張家菖 | Final project | 10H | 95 | |




This week, we have almost done our project, however, when we were testing our heat controller, it just heated the water, **and it did not stop warming as it reached the goal temperature**.
We found the reason why it couldn't control was that the resistor for setting goal temperature would provide a small voltage when the water temperature was almost reaching our goal temperature, and our amplifier will amplify it too large so that it still made the heater working.
We may try to fix this problem by **adjusting our main circuit this week**, re-test our controller, record our data and write the report.

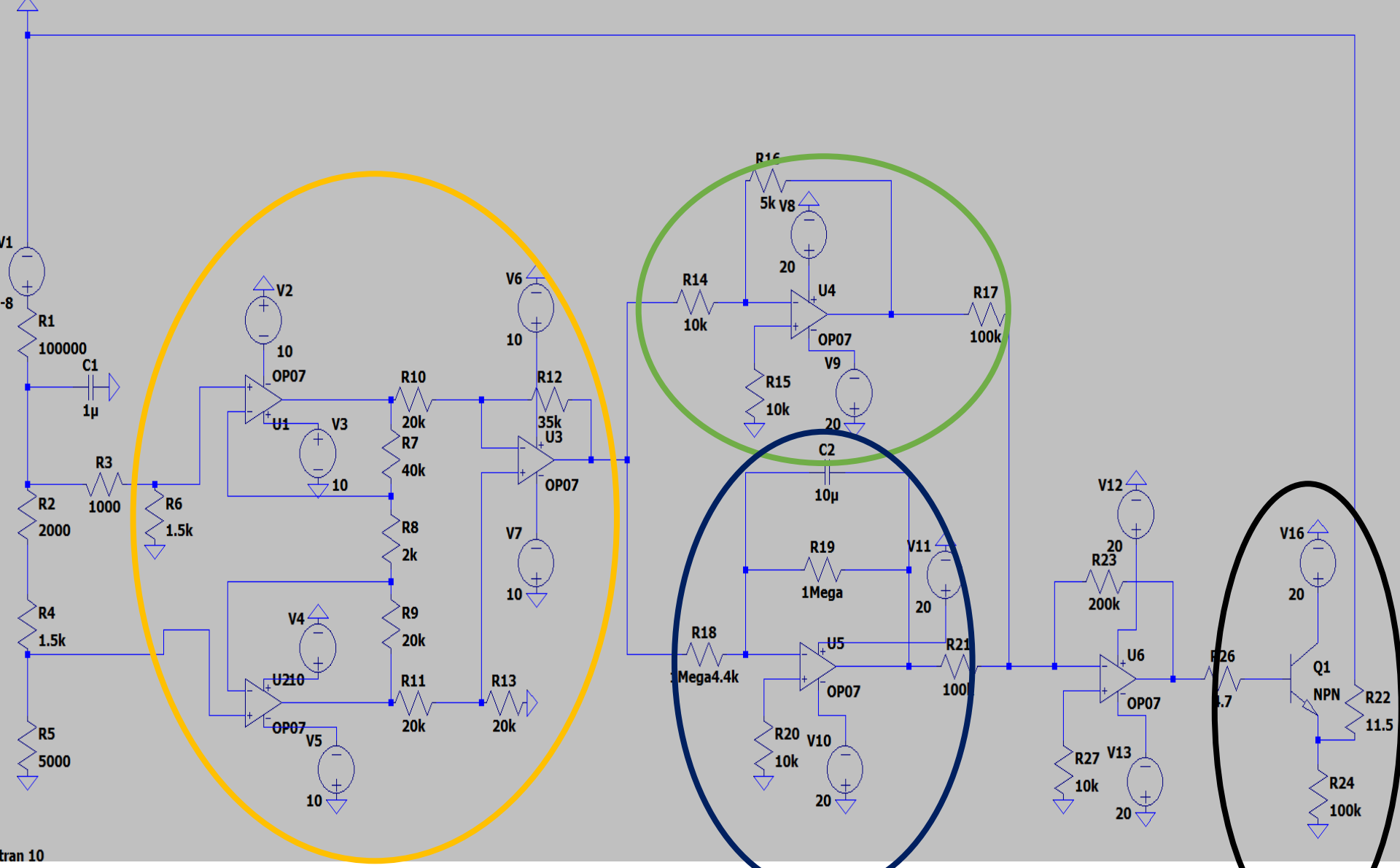



Fig1.structure

Amplify the error V

PID(we remove the D because the parameter of D is too small in our system)

Emitter follow

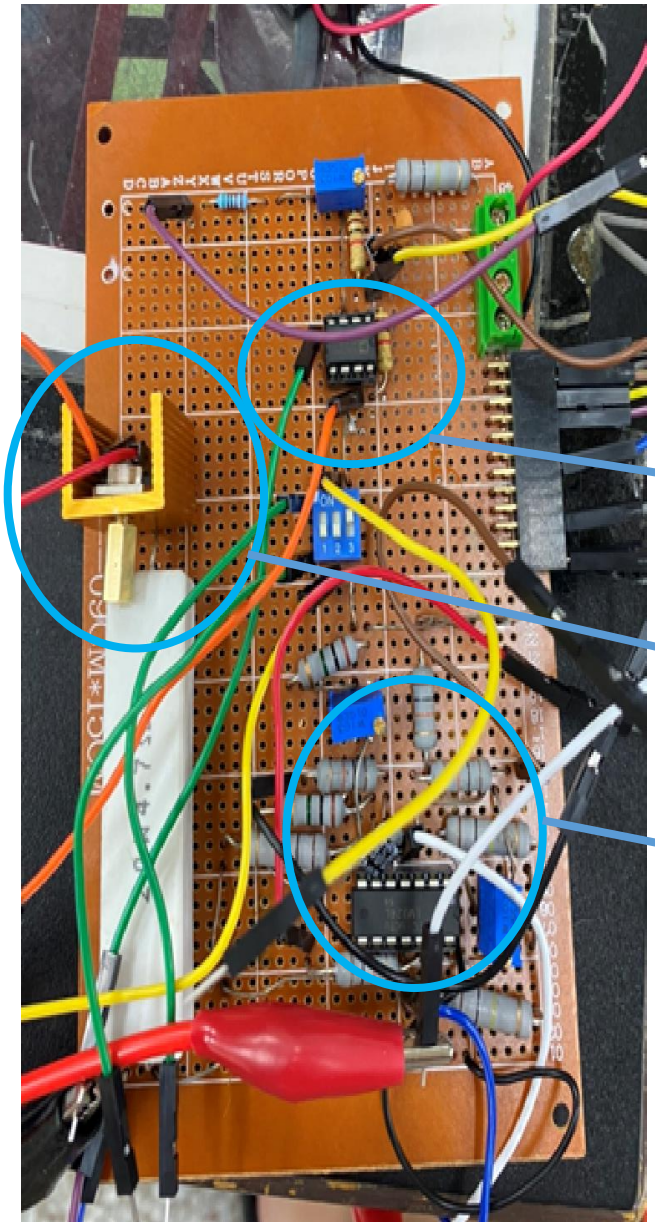
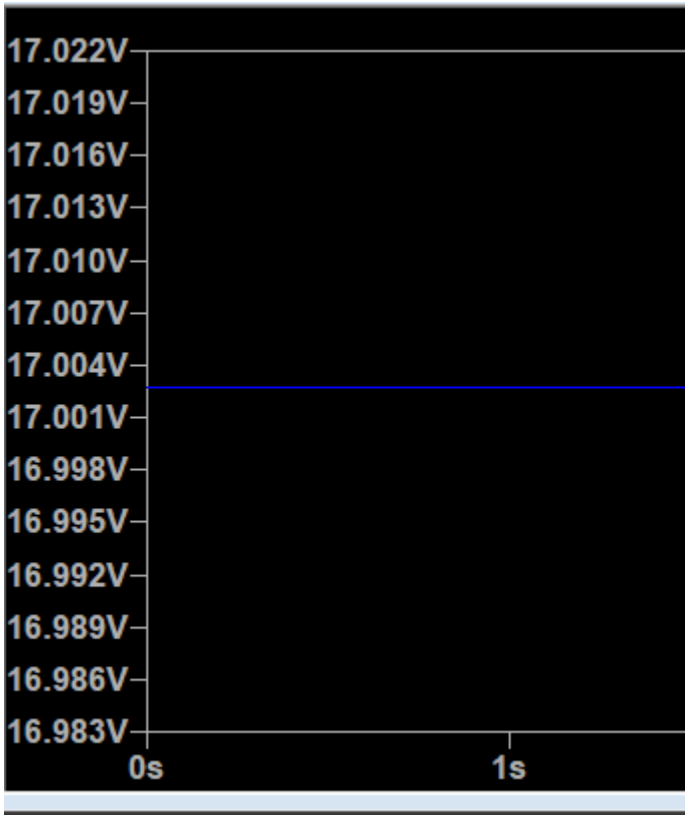



Fig:2
Welded **main circuit.**

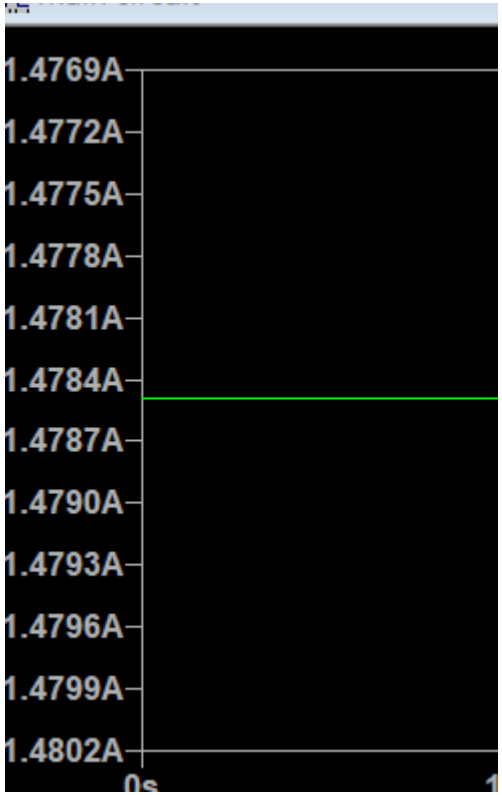




Fig:3 Date.
Our main circuit provided
the voltage(18V) and current(1.46A).

Fig:4 Modeling
Our modeling of main circuit provided
the voltage (17V) the current (1.4784A)

Fig 3 and fig 4 show that our product works

This week:

1. Adjusting our main circuit.

2. Analyzing the data

3. Write the report

Next week:

1. Oral presentation

Cost:

Total: about 1800NTD