CHAPTER 6 CONCLUSION

The following are the conclusions obtained from the results of research / testing tools using Ultrasonic sensors and Wemos D1 Mini :

- 1. The Wemos D1 mini microcontroller can be connected to WiFi so that it can send output in the form of sound, LED lights.
- 2. Ultrasonic sensor HC-SR04 can function properly, so it can detect any object obstacles.
- 3. Ultrasonic sensor HC-SR04 used in this study can detect obstacles with an angle of 0° to 15° no more.

In this research tool there are also several problems, the problems obtained include the following:

- 1. For tool design, there is a problem when you have to solder all the circuits together with the Wemos D1 Mini so that the Wemos D1 mini becomes hot and cannot function properly.
- 2. For power usage, the USB cable is still used so that the power supplied is more than 5 volts, this can cause the tool to become damaged or error quickly.
- Installation of tools on PVC pipes is still simple due to the lack of adequate tools.

Suggestions for further research are to add a GPS module that works faster, add more than 1 Ultrasonic sensor, add a display to monitor the distance generated by the Ultrasonic sensor in applications that are used later and add a battery power of less than 5 volts.

