

Interfacing LM35 Sensor to Measure Temperature

In this topic, you will learn how to interface the LM35 sensor with your Bolt WiFi module. We will learn more about the LM35 sensor followed by how we can integrate it with Bolt. We will then record the temperature using this sensor. Once we have collected the temperature data, we will also learn how to send alerts via E-mail and SMS when the temperature value crosses a threshold.

NOTE: Please pay good attention to this topic. You will require the knowledge of this topic, when you are building the capstone project that will be given to you at the end of the training. The project is going to be an industrial project which is a real life example where you can use the learnings of IoT and ML. We will share more details about the capstone project once you have completed all the modules in the training.

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Q. I am not able to sign into the Twilio account, it is like I have to solve the CAPTCHA in order to sign in? What is meant by CAPTCHA?

Here is a video which will explain to you what is a CAPTCHA: <https://www.youtube.com/watch?v=MWu2UiLLJl8>

Q. How long does the temp_sms.py code send an sms? Does it send sms only once, or does it send sms everytime the temperature goes beyond bounds?

The code will send you an sms everytime the temperature goes beyond its bounds.

However, if you execute the command

```
sudo python temp_sms.py
```

You will need to stay logged into the digital Ocean droplet for the code to keep monitoring the temperature and send you an sms.

[see more \(\)](#)

Q. When I execute temp_email it is showing unexpected indent error. How do I fix this?

In python, the leading whitespace (spaces and tabs) at the beginning of a logical line is used to compute the indentation level of the line, which in turn is used to determine the grouping of statements.

The levels number of white spaces is known as an indentation level.

If you are facing unexpected indent error, it probably means that the white spaces before and after a logical grouping of instructions is different without having any function declaration or any kind of
see more ()

Q. I am getting an indentation error. How do I solve it?

This means that you have not given proper indentation i.e. spaces before the start of each line of code. Do check the code given as part of the tutorial carefully and make suitable changes. I suggest you read the course content again to be sure that there are no errors.

Q. If I have multiple input-output devices how are they to be arranged? in series or parallel?

The question of using multiple input-output devices in series or in parallel only comes in if you want to sense or control these devices using a single pin of the Bolt module.

It is not recommended that you try to sense or control multiple devices using a single pin of the Bolt unit.

Using multiple input-output devices with a single pin in the right manner is a skill-intensive task, where the method depends on the devices used and desired system behaviour.

see more ()

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Ask your doubts to the instructor personally if they are not already answered on forum.

Type what you want to ask the instructor



ASK THE INSTRUCTOR