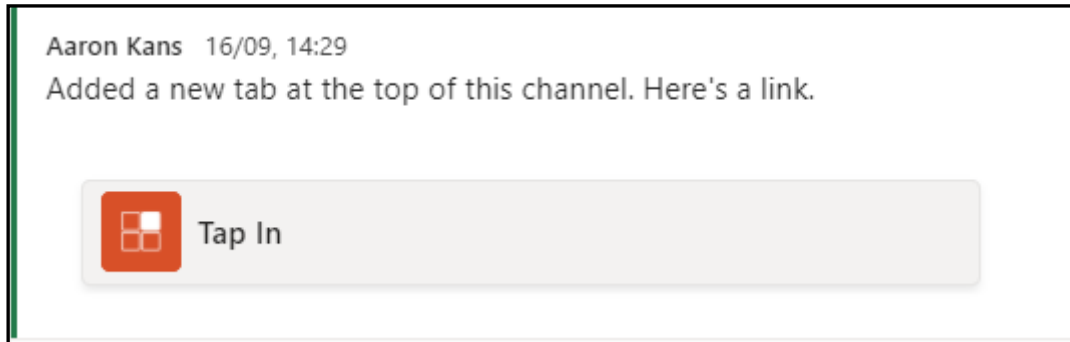


**Before your lab session**, make sure you have:

- **watched** the WEEK 7 & lecture videos on the **CD/CN4001 Moodle Site** by clicking [here](#)
- **logged on** to the live lecture Q&A on **Monday 10-11am** via the **CD4001/CN4001 Teams** site by clicking [here](#).
- When joining the Q&A on Teams, please make sure you click the **Tap-In** button at the top of the **General channel** at 10am (link [here](#)):



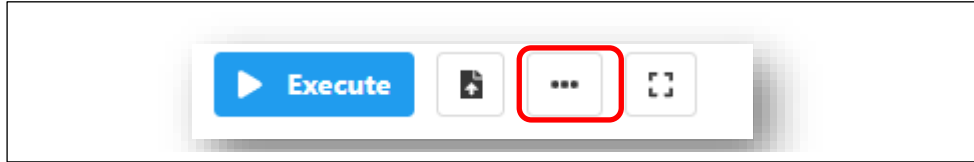
Then check your timetable to find out the day/time/location of your lab session.

*If you have permission from your course leader to study remotely, follow these instructions to access your remote lab (Tuesday 4-6pm):*

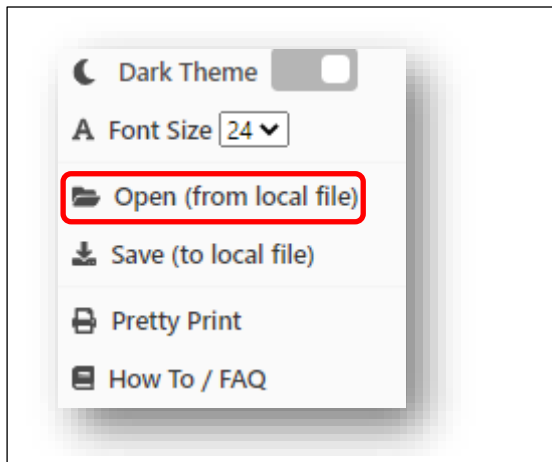
1. Go to the ON-LINE LAB (Tue 4-6) channel on your **CN4001/CD4001 Software Development Microsoft Teams** site by clicking [here](#).
2. Wait for your tutor to start the lab session. To join the session, click on the “**Join**” button that will appear when your tutor starts the session.

To open the web-based Java IDE called **JDoodle** click [here](#). Go to Moodle/ Teams; download and save the **TemperatureReadingsApp.java** file onto your desktop then:

- a) Select the three dots by the **Execute** button:



- b) From the pop-up menu select **Open (from local file)** and browse to your **TemperatureReadingsApp.java** file on your machine to open that file in JDoodle



- c) To allow for user input slide the **Interactive** slider to the **on** position.



**ASSESSED TASK: 4 marks**

For this task we will modify the **TemperatureReadingsApp** program discussed in the lecture and loaded into your IDE following the instructions above.

- a) Compile and run this program to make sure it is working.
- b) Design and implement a method, **wasHot**, which accepts the temperature array and displays all days that recorded temperatures of 18 degrees or over. Modify the **main** method so that this **wasHot** method is called after the **displayTemps** method.
- c) Design and implement another method, **convertToFahrenheit**, which accepts the original temperature array and converts each Celsius temperature to Fahrenheit. The formula for converting Celsius to Fahrenheit is given below:

$$\text{Fahrenheit} = (\text{Celsius} * 9/5) + 32$$

The **convertToFahrenheit** method should then be called from main and then the **displayTemps** method should be called again in the **main** method to display the updated temperatures.

- d) Add some comments into this program
- e) Download the **TemperatureReadingsApp.java** file from **JDoodle** and upload to **Moodle** via the correct **submission link**.