

CD/CN4001: Topic 6 Lab

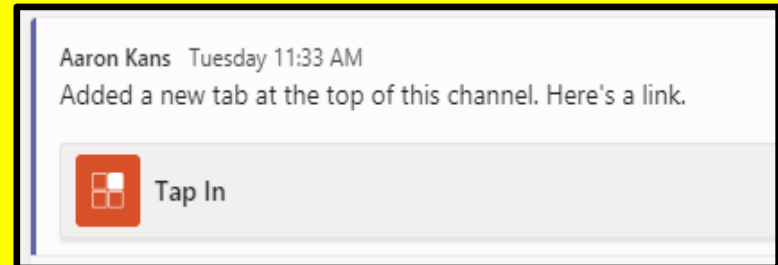
ON CAMPUS

Tap in with your ID card in a **UEL lab**



REMOTE

Click on the Tap in tab in the **General** channel of the Teams site



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Click on the Week 6 block of your Moodle Site

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DO: Lab 6 Tasks



FOLLOW: Lab 6 instruction slides



FindCostApp.java



JDoodle (a web-based Java IDE)

Open the lab 6 tasks/instruction slides

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**NOW – let's tackle
this topic's practical
task.**

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This week we will return to the FindCost app for adding tax to a product's price.

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DO: Lab 6 Tasks



FOLLOW: Lab 6 instruction slides



FindCostApp.java



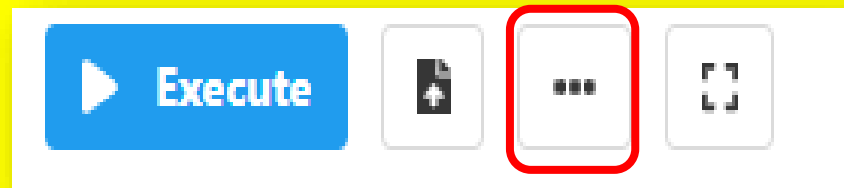
JDoodle (a web-based Java IDE)

**Download
to your
machine**

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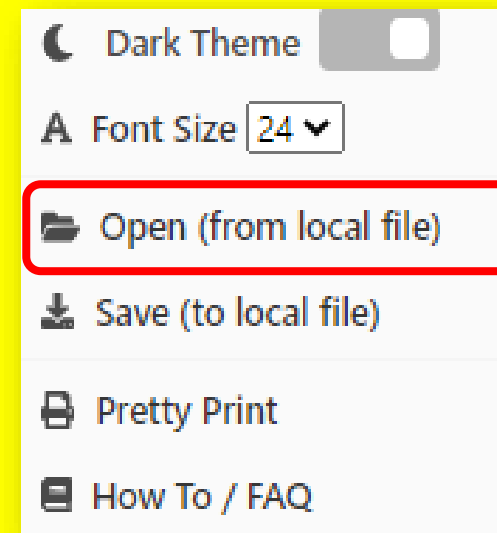
a) Select the three dots by the **Execute** button.



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



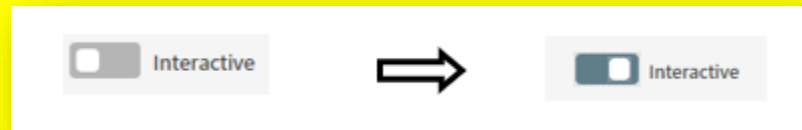
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```
1 import java.util.*;
2
3 public class FindCostApp
4 {
5     public static void main(String[ ] args )
6     {
7         Scanner kbd= new Scanner(System.in);
8         double price, tax;
9
10        System.out.println("*** Product Price Check ***");
11
12        System.out.print("Enter initial price: ");
13        price = kbd.nextDouble();
14
15        System.out.print("Enter tax rate: ");
16        tax = kbd.nextDouble();
17
18        price = price * (1 + tax/100);
19
20        System.out.println("Cost after tax = " + price);
21    }
22 }
```

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



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```
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17
18        price = price * (1 + tax/100);
19
20        System.out.println("Cost after tax = " + price);
21    }
22 }
```

***We will modify
this program in
this lab***

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a) Compile and run the FindCostApp program to make sure it is working.

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**** Product Price Check ****

Enter initial price: 250

Enter tax rate: 12.5

Cost after tax = 281.25

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- b) Re-write this program so that a method, **displayTitle**, is used to display the title

***** Product Price Check *****

YOU HAVE 8 MINUTES!!!



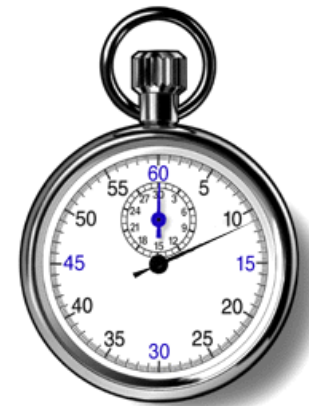
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TIME'S UP!!

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- c) Re-write this program again by using a **displayPrice** method to display the final cost of the product.

YOU HAVE 10 MINUTES!!!



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TIME'S UP!!

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- d) Finally, re-write this program by developing a **calculateFinalPrice** method. This method should **receive the original price** and **tax** rate from the **main** method and then should calculate, and **return back** to **main**, the final price of the product.

YOU HAVE 15 MINUTES!!!



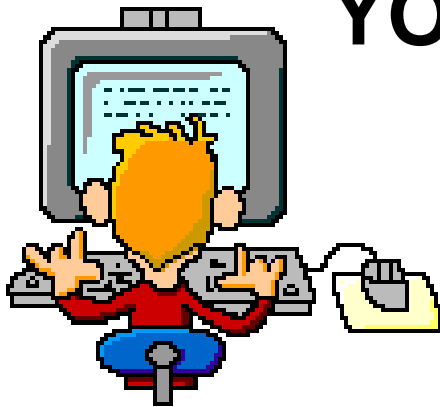
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TIME'S UP!!

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e) Add some **Javadoc** comments at the top of this program

YOU HAVE 5 MINUTES!!!



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TIME'S UP!!

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```
import java.util.*;

/**
 * Program to calculate cost after tax
 * @author Aaron Kans
 * @version 10/10/2020
 */
public class FindCostApp
{
    public static void main(String[ ] args)
    {
        // Program code here
    }
}
```

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Consolidate
wrapping up



UPLOAD: Lab 6 Task (CN4001 students only)



UPLOAD: Lab 6 Task (DTS students only)



TACKLE: Extra challenges

- j) **Download** the **FindCostApp.java** file from **JDoodle** and **upload** to **Moodle** via **the appropriate submission link**.


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ASSESSMENT AND FEEDBACK

| Assessment | Schedule |
|-----------------------------|---|
| Module Quiz 1 (25 marks) | Available in Teaching Week 6 and to be completed by 5th November 2021 (via Moodle) |


Your first Module Quiz is also available for you to access this week

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Consolidate
wrapping up

Module Quiz 1



Dr Aaron Kans
(a.kans@uel.ac.uk)

- Your **first module quiz** will be available from **11am on Monday 1st November**, covering topics **1 – 6** (see link below).
- The quiz has **10 questions** (5 multiple choice questions and 5 short answer questions) and a **time limit of 30 minutes to complete**.
- You will be able to take the quiz **twice** (with the **highest mark** being counted). So use the **first attempt as your mock attempt**.
- You have until **Friday 5th November** (by **4pm**) to complete your quiz attempts.



CN4001 Module Quiz 1 (25 marks)

Available from Monday 1st November (11am) until Friday 5th November (4pm)

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Consolidate
wrapping up



UPLOAD: Lab 6 Task (CN4001 students only)



UPLOAD: Lab 6 Task (DTS students only)



TACKLE: Extra challenges

Spend the rest of the time in this practical working on the **extra challenges**.

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Also watch the short video on the extra topic of Menu Driven Programs.