

CD/CN4001 Topic 2 Lab

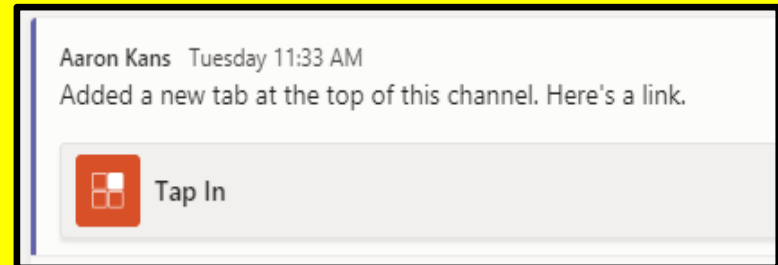
ON CAMPUS

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



CD/CN4001 Topic 2 Lab


MOODLE



Open up your lab tasks for today


CD/CN4001 Topic 2 Lab


MOODLE



ONCAMPUS LAB (ALL): CHECK SCHEDULED SLOT ON TIMETABLE

EMERGENCY ONLINE LAB (ONLY WITH COURSE LEADER PERMISSION): VIA TEAMS SITE, TUE 4-6

 DO: Lab 2 Tasks

 OPEN: JDoodle (a web-based Java IDE)

Open up your lab tasks for today

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In this module we will use the on-line JDoodle tool to write Java code.

<https://www.jdoodle.com/online-java-compiler/>

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JDoodle Introduction


To open the web-based Java IDE called **JDoodle** click [here](#).



Find a link to JDoodle in your worksheet


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TEAMS



ONCAMPUS LAB (ALL): CHECK SCHEDULED SLOT ON TIMETABLE

EMERGENCY ONLINE LAB (ONLY WITH COURSE LEADER PERMISSION): VIA TEAMS SITE, TUE 4-6

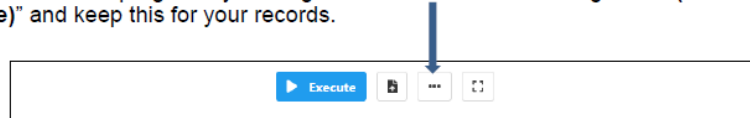
 DO: Lab 2 Tasks

 OPEN: JDoodle (a web-based Java IDE)

You can also find a link to JDoodle on Moodle

CD/CN4001 Topic 2 Lab

- a) Run the existing Java program by hitting the **Execute** button.
- b) Remove the ';' at the end of **line 7** and see what happens when you try and run the program
- c) Add the ';' back into the program and re-run the code.
- d) Download the program by clicking the three dots then selecting "**Save (to local file)**" and keep this for your records.



- e) Delete the code within the **main** method, rename the class **ZodiacApp** and align the braces as follows:

```
1 public class ZodiacApp
2 {
3     public static void main(String args[])
4     {
5     }
6 }
7 }
```

- f) Write **two lines of code**, one to print your name and one to print your Zodiac Sign (or month of birth).
- g) Run your program, ensuring you have no errors, and check your results. For example:

```
Aaron Kans
Leo
```

- h) Download this program for your records and then upload it to the Moodle site using the submission link.

***Read and
work through
these lab
tasks***

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```
Aaron Kans
Leo
```

- h) Download this program for your records and then upload it to the Moodle site using the submission link.

Lets start by looking at tasks (a) to (d)

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```
1 public class MyClass {  
2     public static void main(String args[]) {  
3         int x=10;  
4         int y=25;  
5         int z=x+y;  
6  
7         System.out.println("Sum of x+y = " + z);  
8     }  
9 }
```

JDoodle opens with this sample Java program

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```
1 public class MyClass {  
2     public static void main(String args[]) {  
3         int x=10;  
4         int y=25;  
5         int z=x+y;  
6  
7         System.out.println("Sum of x+y = " + z);  
8     }  
9 }
```

***Even if you have never programmed before
see if you can try and figure out what is going
on here***

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```
1 public class MyClass {  
2     public static void main(  
3         int x=10;  
4         int y=25;  
5         int z=x+y;  
6  
7         System.out.println("Su  
8     }  
9 }
```

*Then run the
program by
clicking the
Execute button.*



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```
1 public class MyClass {  
2     public static void main(String args[]) {  
3         int x=10;  
4         int y=25;  
5         int z=x+y;  
6  
7         System.out.println("Sum of x  
8     }  
9 }
```

***Program will run
in the Results bar
at the bottom.***

▶ Execute

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```
1 public class MyClass {  
2     public static void main(String args[]) {  
3         int x=10;  
4         int y=25;  
5         int z=x+y;  
6  
7         System.out.println("Sum of x+y = " + z);  
8     }  
9 }
```

Execute

Try removing the ';' from the end of line 7 and running again

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```
1 public class MyClass {  
2     public static void main(String args[]) {  
3         int x=10;  
4         int y=25;  
5         int z=x+y;  
6  
7         System.out.println("Sum of x+y  
8     }  
9 }
```

Execute

Programs with errors can't run – instead errors will be reported.

```
/MyClass.java:7: error: ';' expected  
    System.out.println("Sum of x+y = " + z)  
                        ^  
1 error
```

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```
1 public class MyClass {  
2     public static void main(String args[]) {  
3         int x=10;  
4         int y=25;  
5         int z=x+y;  
6  
7         System.out.println("Sum of x+y = " + z);  
8     }  
9 }
```

***Fix the error
by adding
back in the
';' and re-run***

Execute

```
/MyClass.java:7: error: ';' expected  
    System.out.println("Sum of x+y = " + z)  
                                ^  
1 error
```

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```
1 public class MyClass {  
2     public static void main(String ar  
3         int x=10;  
4         int y=25;  
5         int z=x+y;  
6  
7         System.out.println("Sum of x+y  
8     }  
9 }
```

***To save this
program file
to your
machine click
these three
dots***

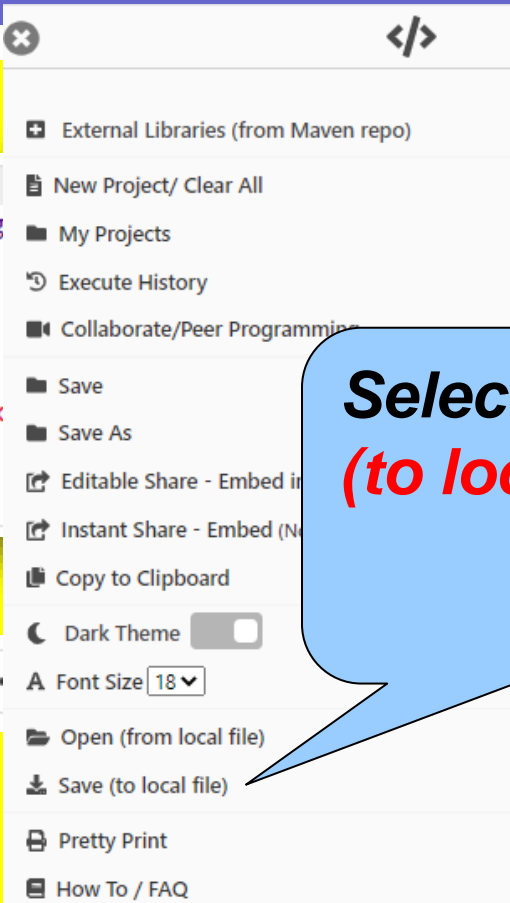
▶ Execute



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```
1 public class MyClass {  
2     public static void main(String  
3         int x=10;  
4         int y=25;  
5         int z=x+y;  
6  
7         System.out.println("Sum of x  
8     }  
9 }
```

Execute



**Select Save
(to local file)**

*This **MyClass.java** file will now be on your machine (Probably in your Downloads folder)*

```
1 public class MyClass {  
2     public static void main(String args[]) {  
3         int x=10;  
4         int y=25;  
5         int z=x+y;  
6  
7         System.out.println("Sum of x+y = " + z);  
8     }  
9 }
```

▶ Execute



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- a) Run the existing Java program by hitting the **Execute** button.
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```
1 public class ZodiacApp
2 {
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5     }
6 }
7 }
```

- f) Write **two lines of code**, one to print your name and one to print your Zodiac Sign (or month of birth).
- g) Run your program, ensuring you have no errors, and check your results. For example:

```
Aaron Kans
Leo
```

- h) Download this program for your records and then upload it to the Moodle site using the submission link.

***Now lets
look at
tasks (e) to
(h) to create
a **ZodiacApp**
program***

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Online Java Compiler IDE
For Multiple Files, Custom Library and File Read/Write, use our new - [Advanced Java IDE](#)

```
1 public class MyClass {  
2     public static void main(String args[]) {  
3         int x=10;  
4         int y=25;  
5         int z=x+y;  
6  
7         System.out.println("Sum " + z);  
8     }  
9 }
```

Execute Mode, Version, Inputs & Arguments
JDK 11.0.4
CommandLine Arguments

Result

*Let's remove the **demo code** that you will see when you open this tool*

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Highlight and delete the code *in the main method*

```
1 public class MyClass {  
2     public static void main(String args[]) {  
3         int x=10;  
4         int y=25;  
5         int z=x+y;  
6  
7         System.out.println("Sum of x+y = " + z);  
8     }  
9 }
```

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Highlight and delete the code *in the main method*

```
1 public class MyClass {  
2     public static void main(String args[]) {  
3  
4     }  
5 }
```

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*If you like, **shift the opening braces** to match the style we prefer*

```
1 public class MyClass {  
2     public static void main(String args[]) {  
3  
4     }  
5 }
```

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*If you like, **shift the opening braces** to match the style we prefer*

```
1 public class MyClass
2 {
3     public static void main(String args[])
4     {
5
6     }
7 }
8
```


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*You can also
rename your class
name to **ZodiacApp***

```
1 public class MyClass
2 {
3     public static void main(String args[])
4     {
5         ...
6     }
7 }
8
```

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*You can also rename
your class name to
ZodiacApp*

```
1 public class ZodiacApp
2 {
3     public static void main(String args[])
4     {
5
6     }
7 }
8
```

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```
1 public class ZodiacApp
2 {
3     public static void main(String args[])
4     {
5
6     }
7 }
8
```

You can now *write your code* in the main method

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- f) Write **two lines of code**, one to print your name and one to print your Zodiac Sign (or month of birth).
- g) Run your program, ensuring you have no errors, and check your results. For example:

```
Aaron Kans  
Leo
```

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Printing Messages to the screen in Java: a reminder

```
public class Hello
{
    public static void main(String[ ] args)
    {
        System.out.println("Hello world");
    }
}
```

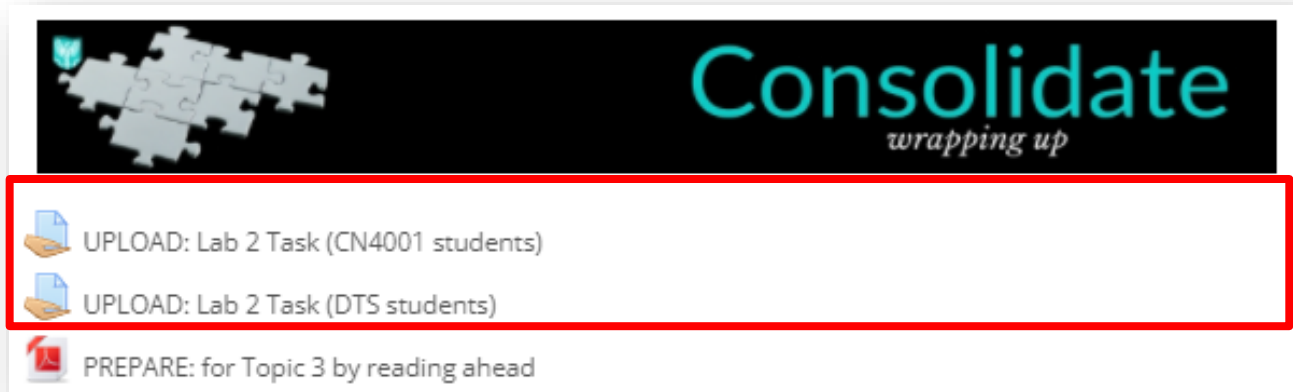
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Printing Messages to the screen in Java: a reminder



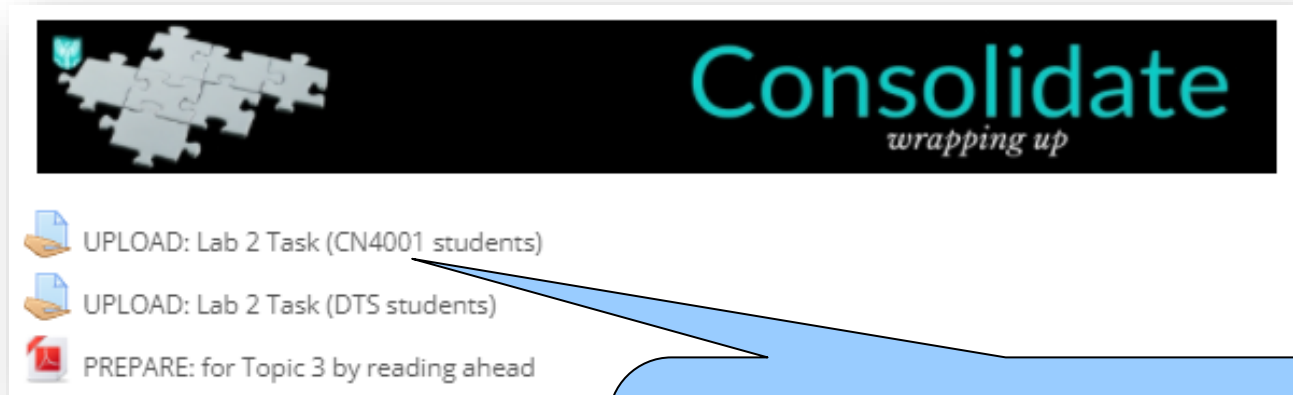
Hello world

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Upload your **ZodiacApp.java** file to **Moodle** so your tutors can check you have completed this task successfully.

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*To upload your file click on the relevant **Upload Link** in the **Week 2 Consolidate** block of your Moodle site*

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DO: Lab Task Upload Link

Submission status

Submission status	No attempt
Grading status	Not graded
Due date	Monday, 19 October 2020, 9:00 A
Time remaining	15 days 20 hours
Last modified	-
Submission comments	► Comments (0)

**Click Add
Submission**

Add submission

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DO: Lab Task Upload Link

File submissions

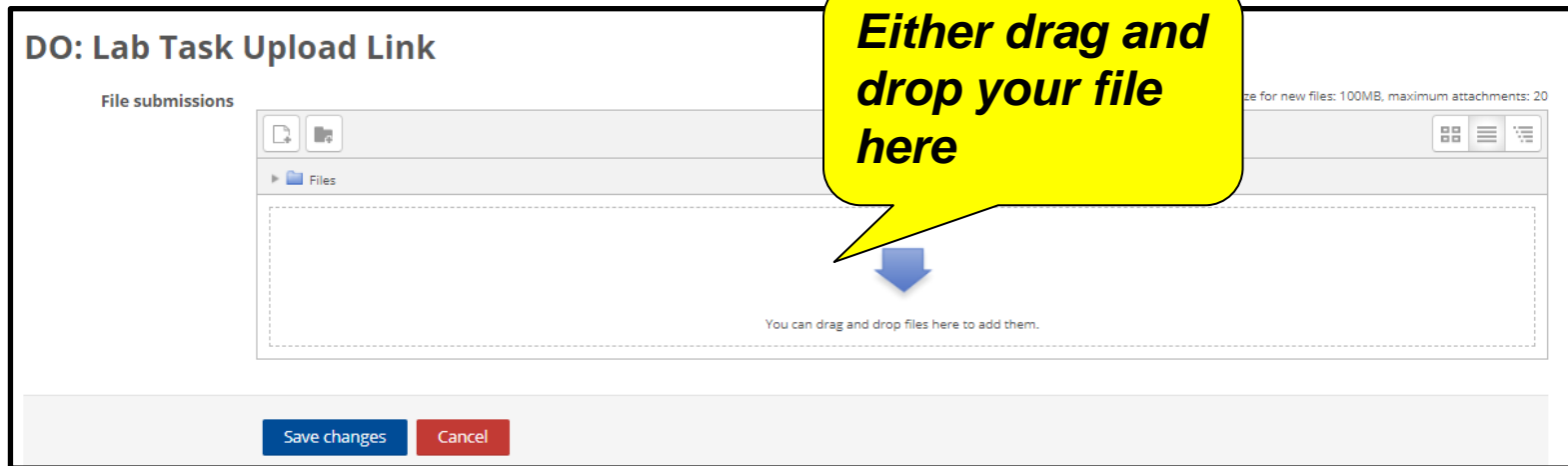
Size for new files: 100MB, maximum attachments: 20

Files

You can drag and drop files here to add them.

Either drag and drop your file here

Save changes Cancel

The image shows a web interface for file uploads. At the top, there's a header 'DO: Lab Task Upload Link'. Below it, the section is titled 'File submissions'. To the right, there's a note: 'Size for new files: 100MB, maximum attachments: 20'. The main area is a file manager interface with a 'Files' tab. It contains a large dashed rectangular box for dropping files, with the text 'You can drag and drop files here to add them.' below it. A yellow speech bubble with the text 'Either drag and drop your file here' points to this dashed box. At the bottom of the interface are two buttons: 'Save changes' (blue) and 'Cancel' (red).

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DO: Lab Task U

File submissions

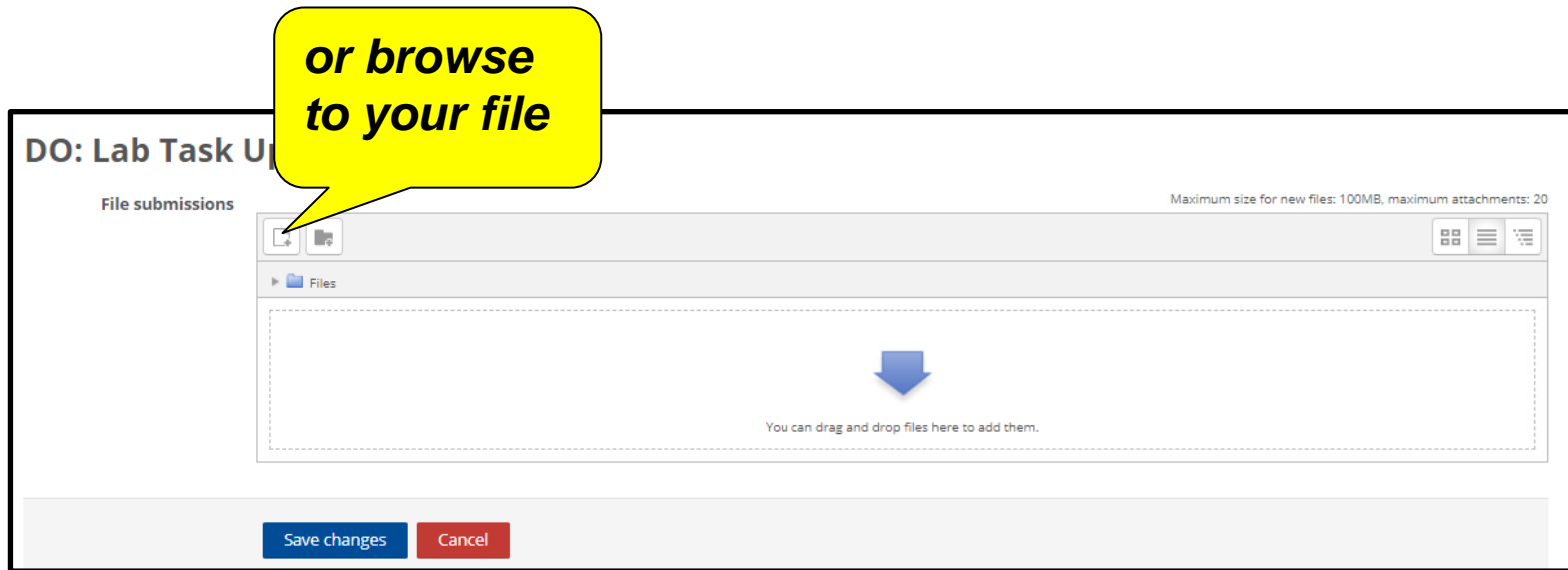
Maximum size for new files: 100MB, maximum attachments: 20

or browse to your file

Files

You can drag and drop files here to add them.

Save changes Cancel

The image shows a web interface for file submissions. At the top left, there's a header 'DO: Lab Task U'. Below it, the section is titled 'File submissions'. To the right, a note states 'Maximum size for new files: 100MB, maximum attachments: 20'. A yellow speech bubble with the text 'or browse to your file' points to a file selection icon (a folder with a plus sign) in the top left of the submission area. Below this icon is a 'Files' section with a large dashed rectangular area for file uploads. Inside this area is a blue downward-pointing arrow and the text 'You can drag and drop files here to add them.' At the bottom of the interface are two buttons: 'Save changes' (blue) and 'Cancel' (red).

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DO: Lab Task Upload Link

File submissions Maximum size for new files: 100MB, maximum attachments: 20

Files

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Select Save Changes

Save changes Cancel