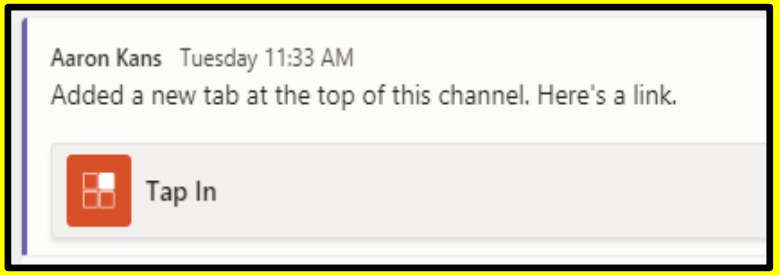
CD/CN4001 Topic 2 Lab

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



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MOODLE

Open up your lab tasks for today

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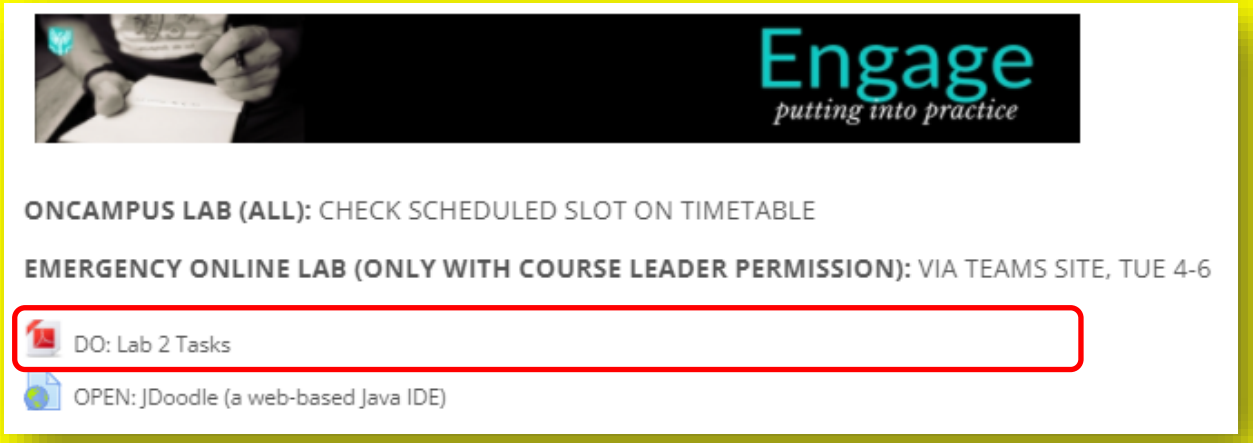
MOODLE



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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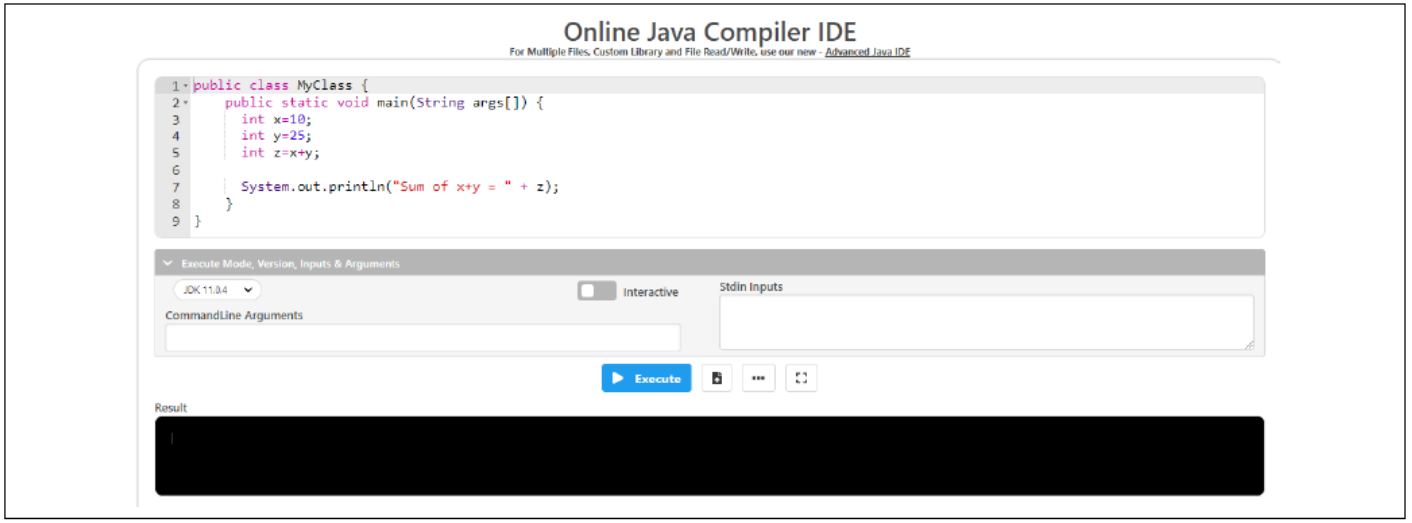
JDoodle Introduction

To open the web-based Java IDE called **JDoodle** click here.



Find a link to JDoodle in your worksheet

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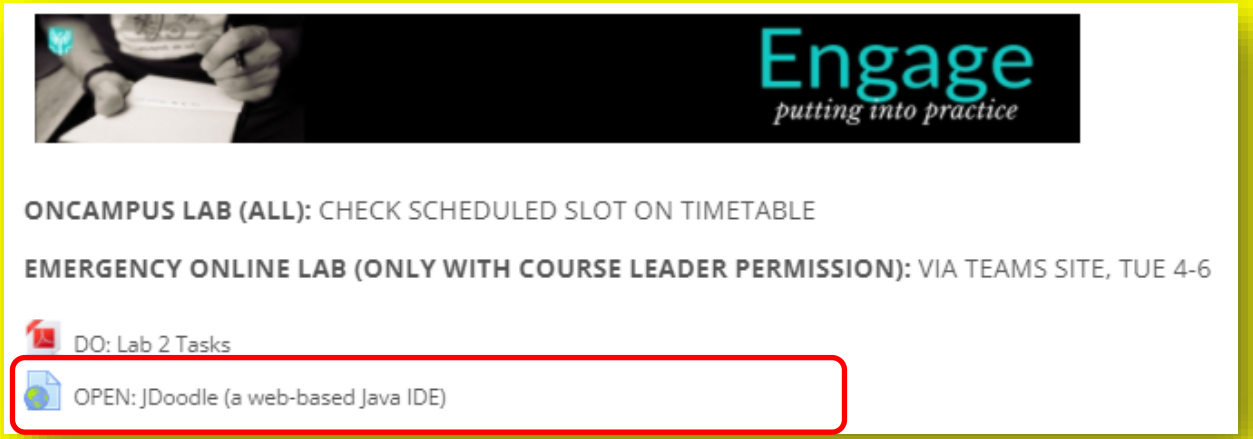
TEAMS



You can also find a link to JDoodle on Moodle

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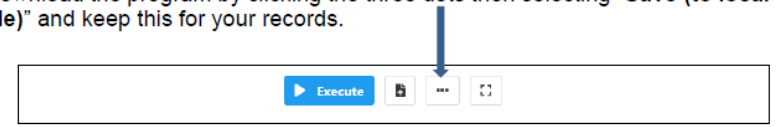
a) Run the existing Java program by hitting the **Execute** button.

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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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.

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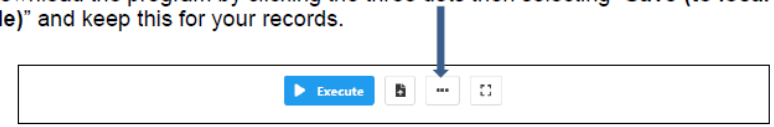

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g) Run your program, ensuring you have no errors, and check your results. For example:

```
Aaron Kans
Leo
```

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

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

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```java
public class MyClass {
    public static void main(String args[]) {
      int x=10;
      int y=25;
      int z=x+y;

      System.out.println("Sum of x+y = " + z);
    }
}
```

JDoodle opens with this sample Java program

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```java
public class MyClass {
    public static void main(String args[]) {
      int x=10;
      int y=25;
      int z=x+y;

      System.out.println("Sum of x+y = " + z);
    }
}
```

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.

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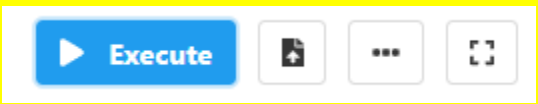
```
1  public class MyClass {
2      public static void main(String args[]) {
3        int x=10;
4        int y=25;
5        int z=x+y;
6
7        System.out.println("Sum of x+y = " + z);
8      }
9  }
```



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

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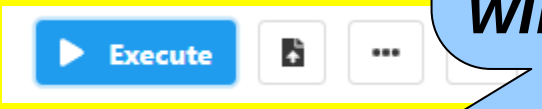
```
1  public class MyClass {
2      public static void main(String args[]) {
3        int x=10;
4        int y=25;
5        int z=x+y;
6
7        System.out.println("Sum of x+y
8      }
9  }
```

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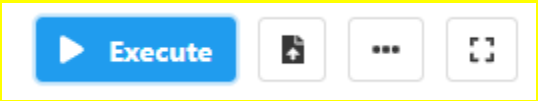
Fix the error by adding back in the ';'and re-run

```
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  }
```




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

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```
1  public class MyClass {
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3          int x=10;
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6
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9  }
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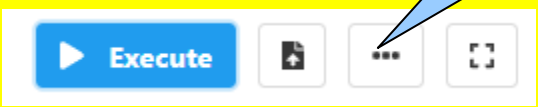

To save this program file to your machine click these three dots

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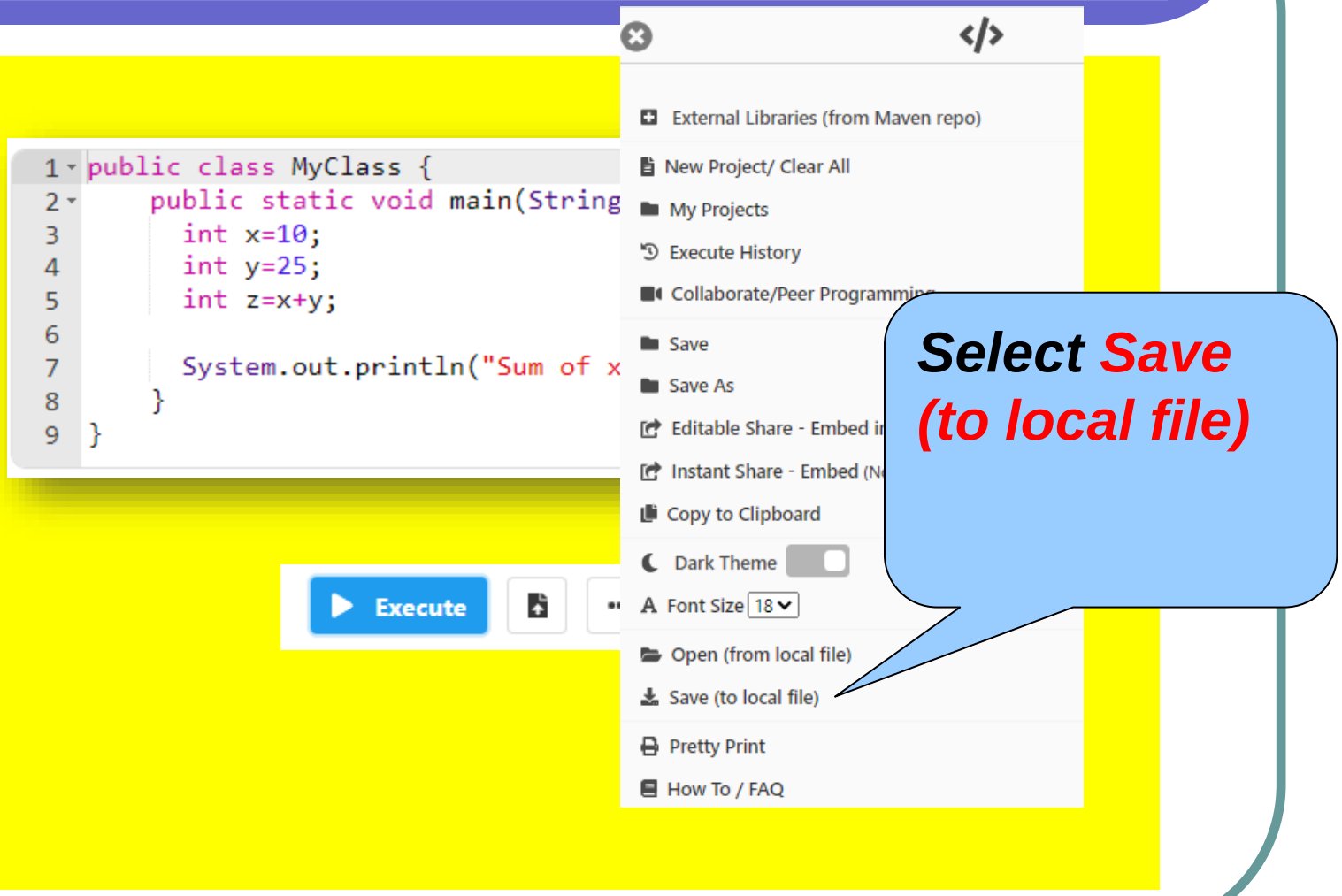

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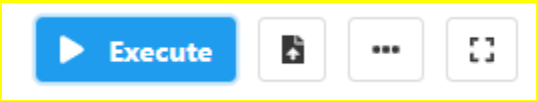
This MyClass.java file will now be on your machine (Probably in your Downloads folder)

```
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  }
```



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a) Run the existing Java program by hitting the **Execute** button.

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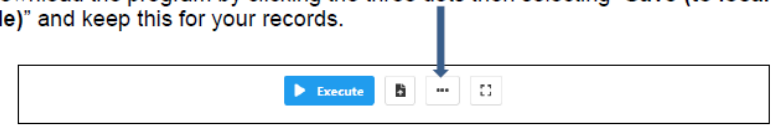

e) Delete the code within the **main** method, rename the class **ZodiacApp** and align the braces as follows:

```
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.

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

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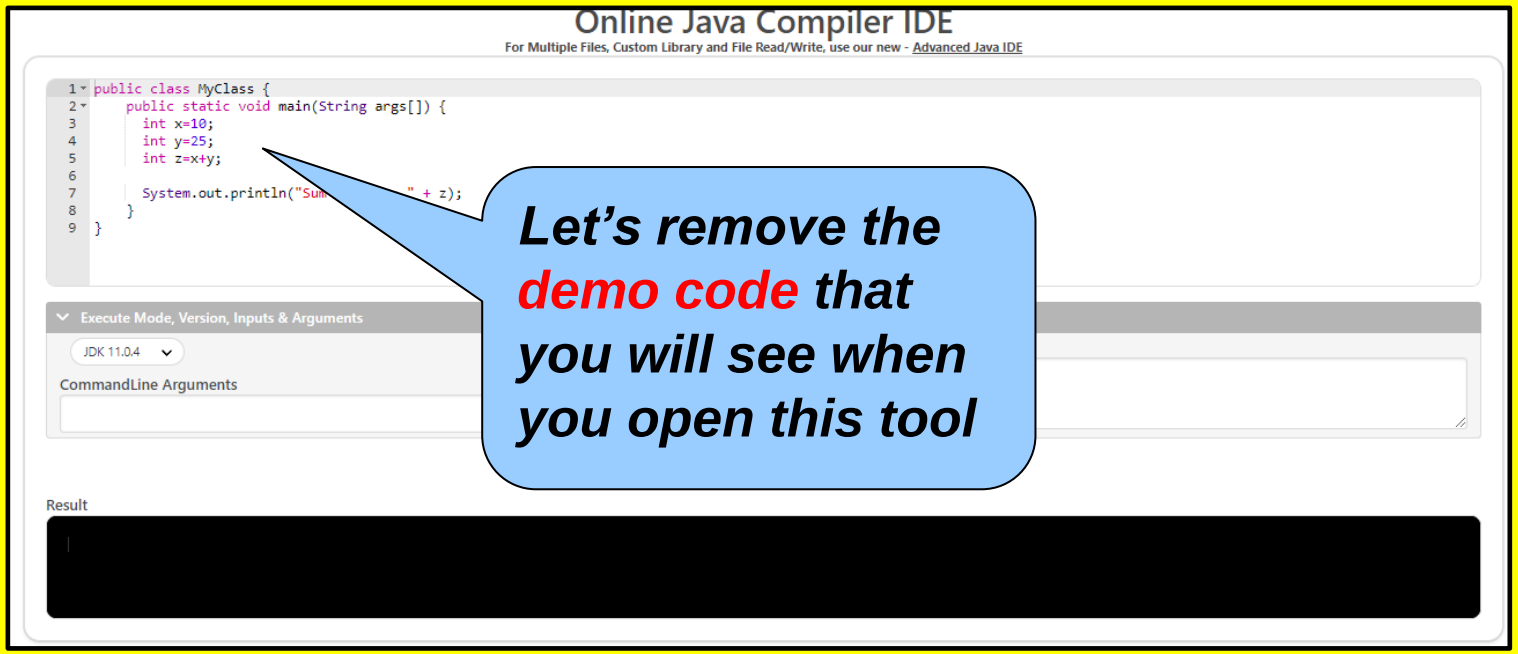

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Highlight and delete the code in the main method

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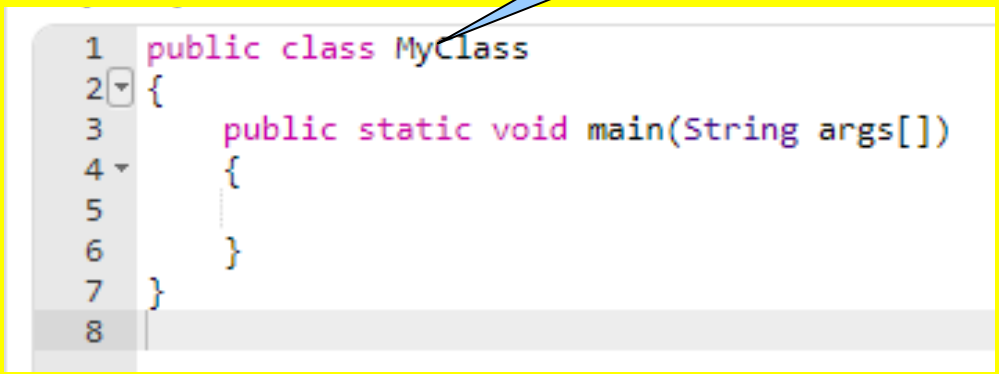
You can also rename your class name to ZodiacApp



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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:

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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

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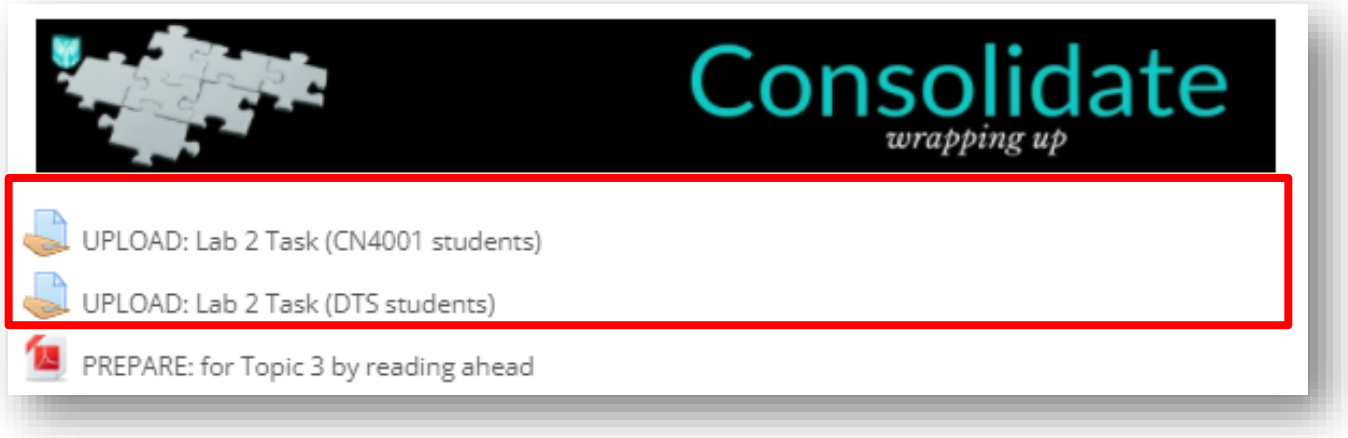

Upload your ZodiacApp.java file to Moodle so your tutors can check you have completed this task successfully.

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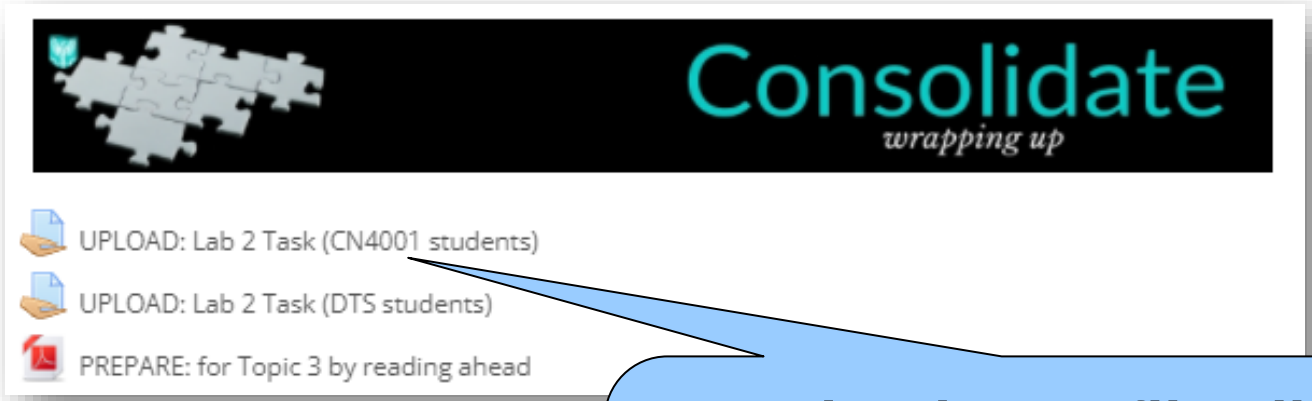

To upload your file click on the relevant Upload Link in the Week 2 Consolidate block of your Moodle site

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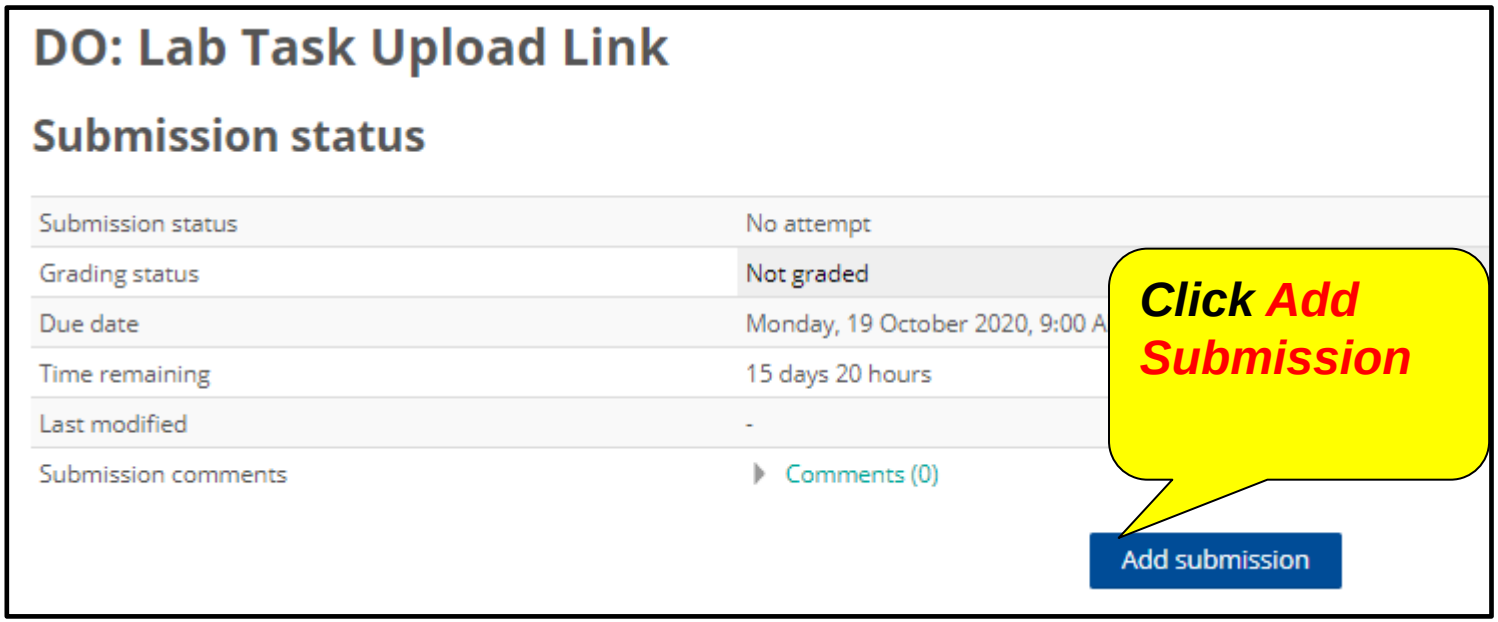

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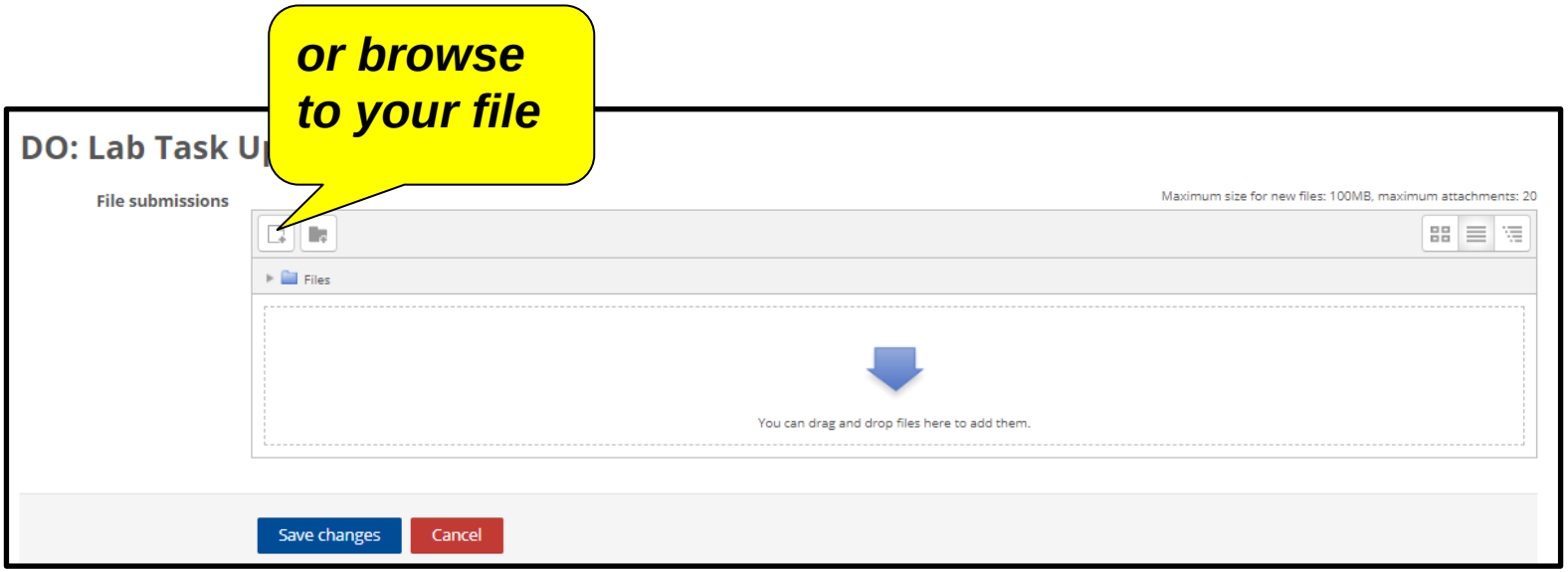

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