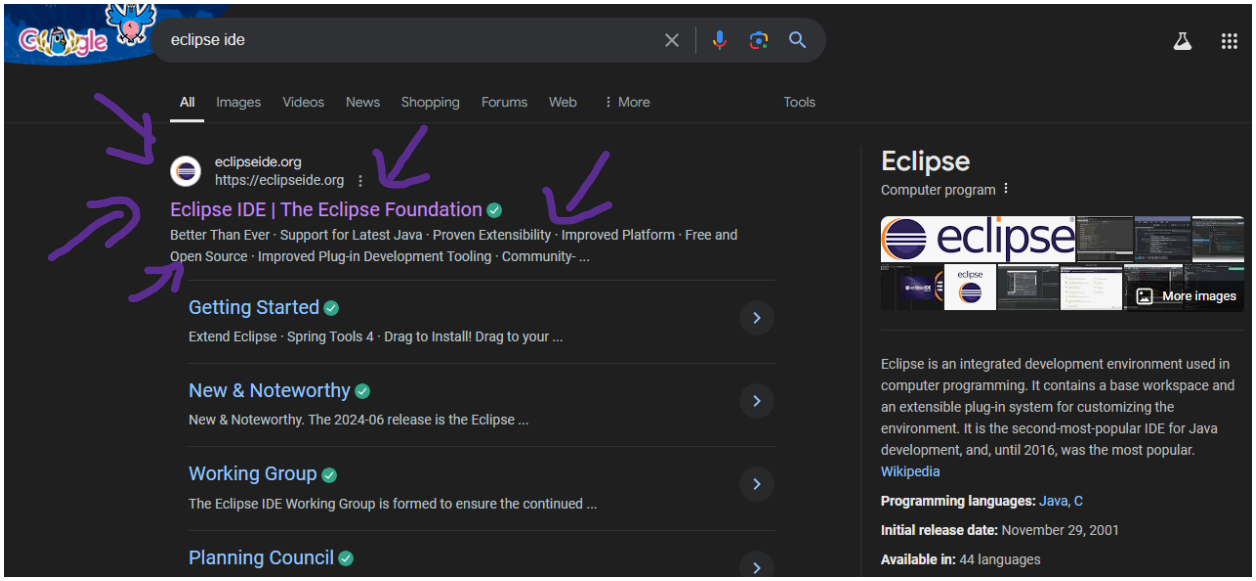
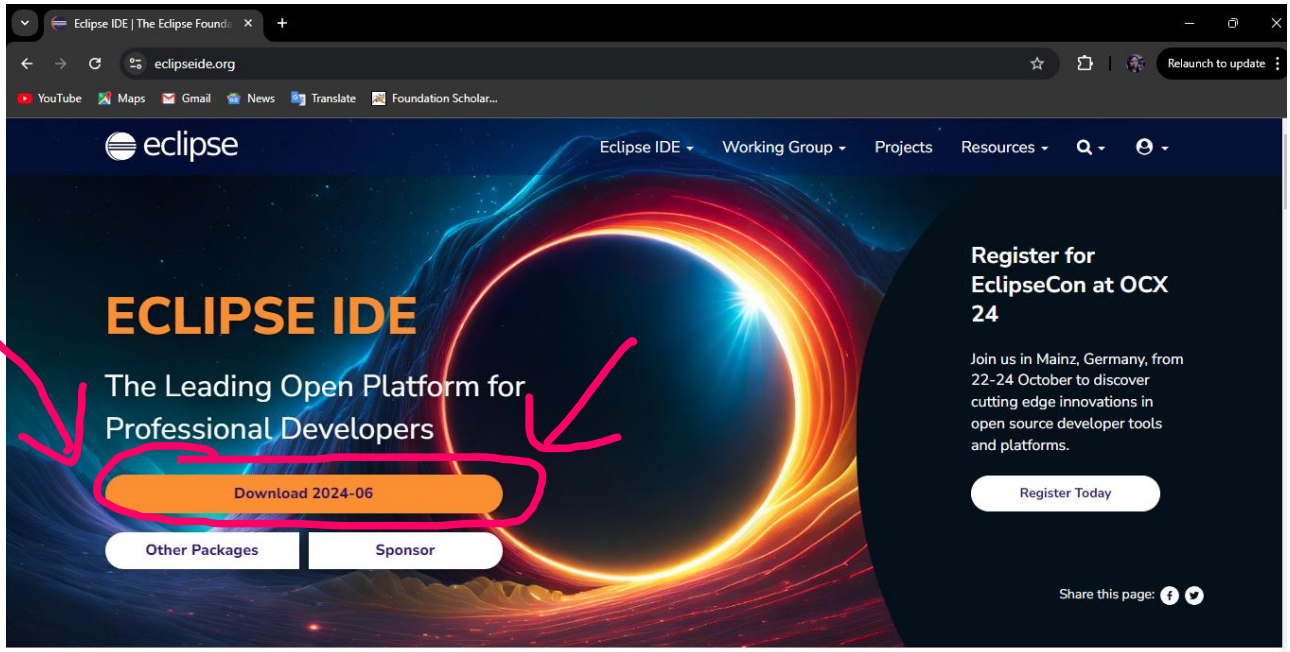
How to Download the IDE for Eclipse Java Edition

(Thanks to a summer update it will only allow you to use Java 21 for installing purposes) (You can change this later when the IDE is properly set up) (Your textbook is written in Java 8 so somethings may not work anymore/exist in the most up to date version)

1. Search for Ellipse on Google.



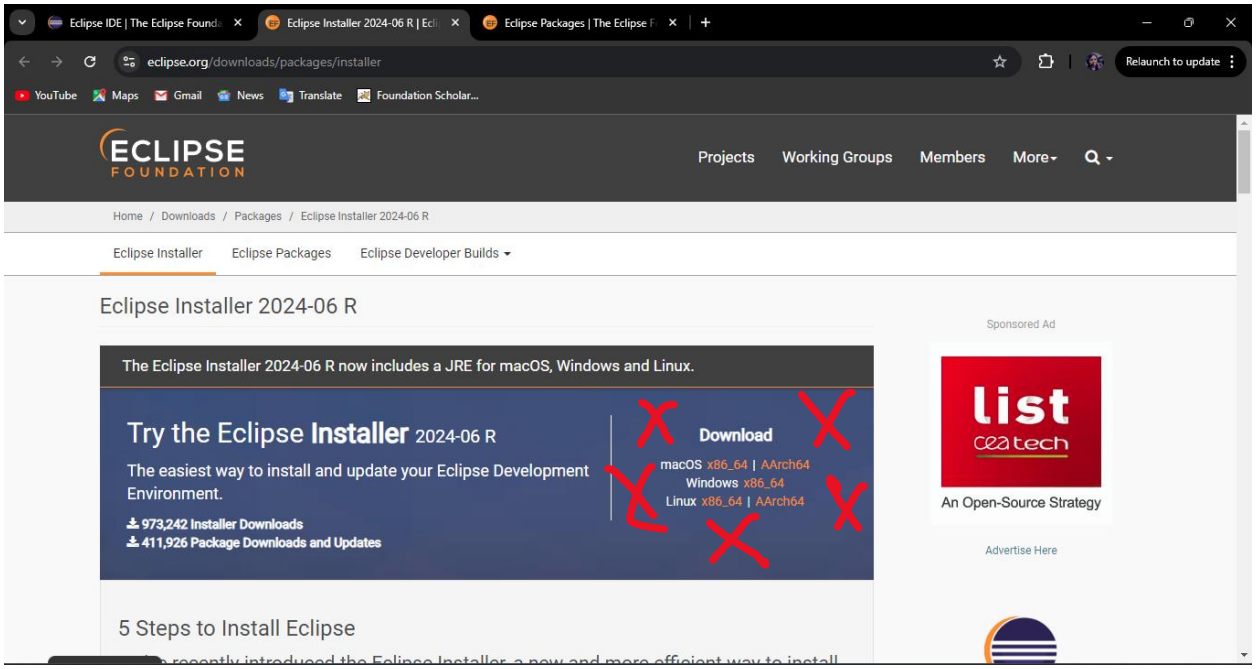
2. Click the first link.
3. Click the big orange download button.

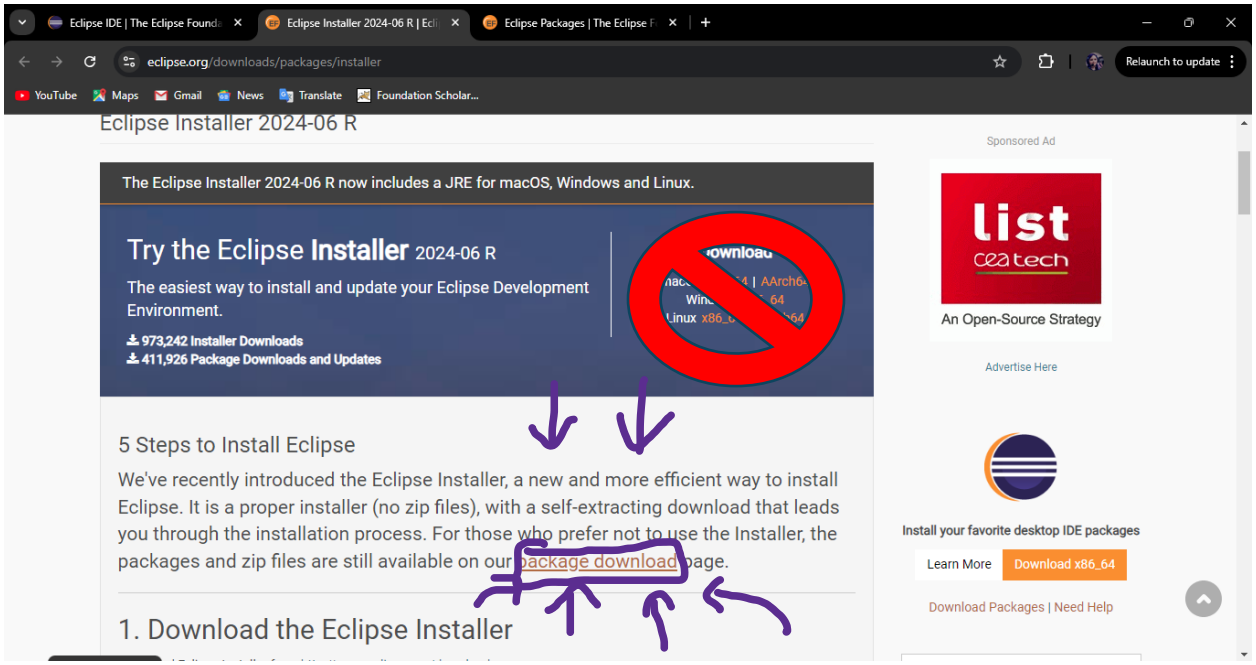


a. You will then be brought to a page that looks like this, scroll slightly down till you find **"5 Steps to install Eclipse"**

b. ***(If you are not brought to Eclipse installer initially) *** Find the section that is called **download packages.**

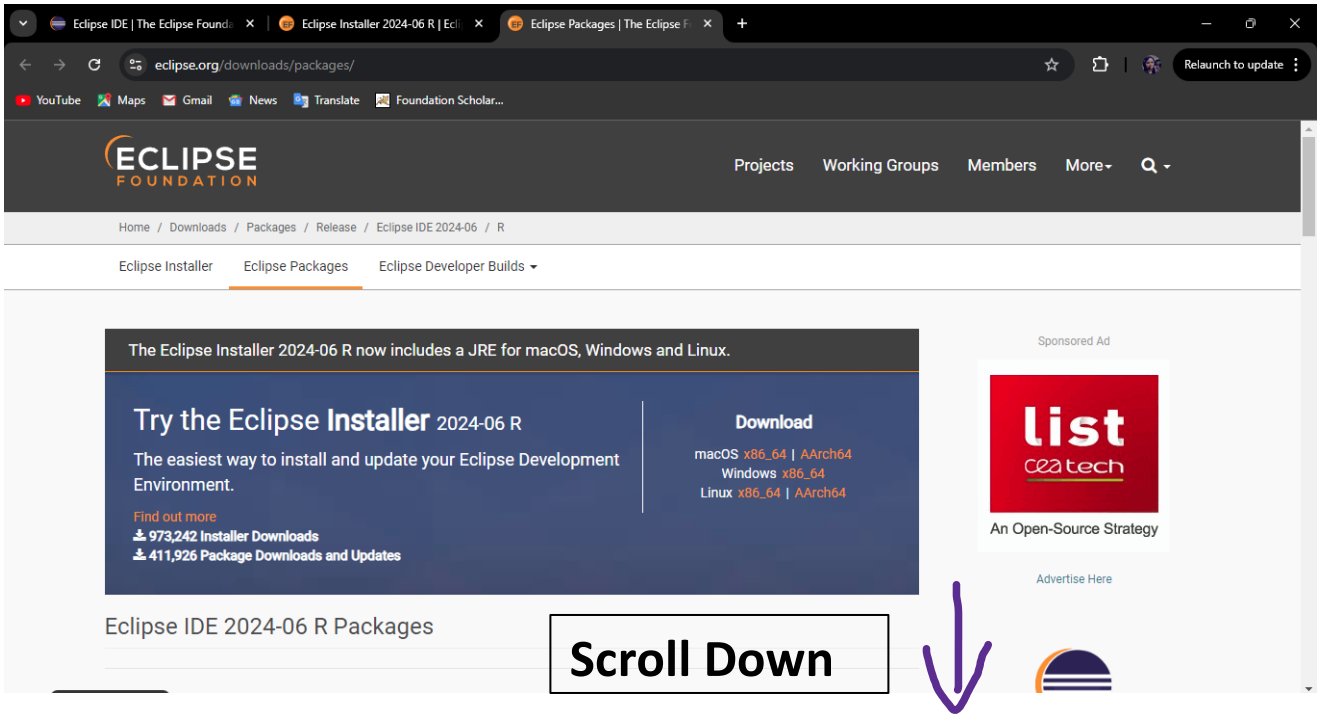
c. *******DO NOT CLICK THE DOWNLOAD LINKS IN THE BLUE PART OF THE BOX GUI*******

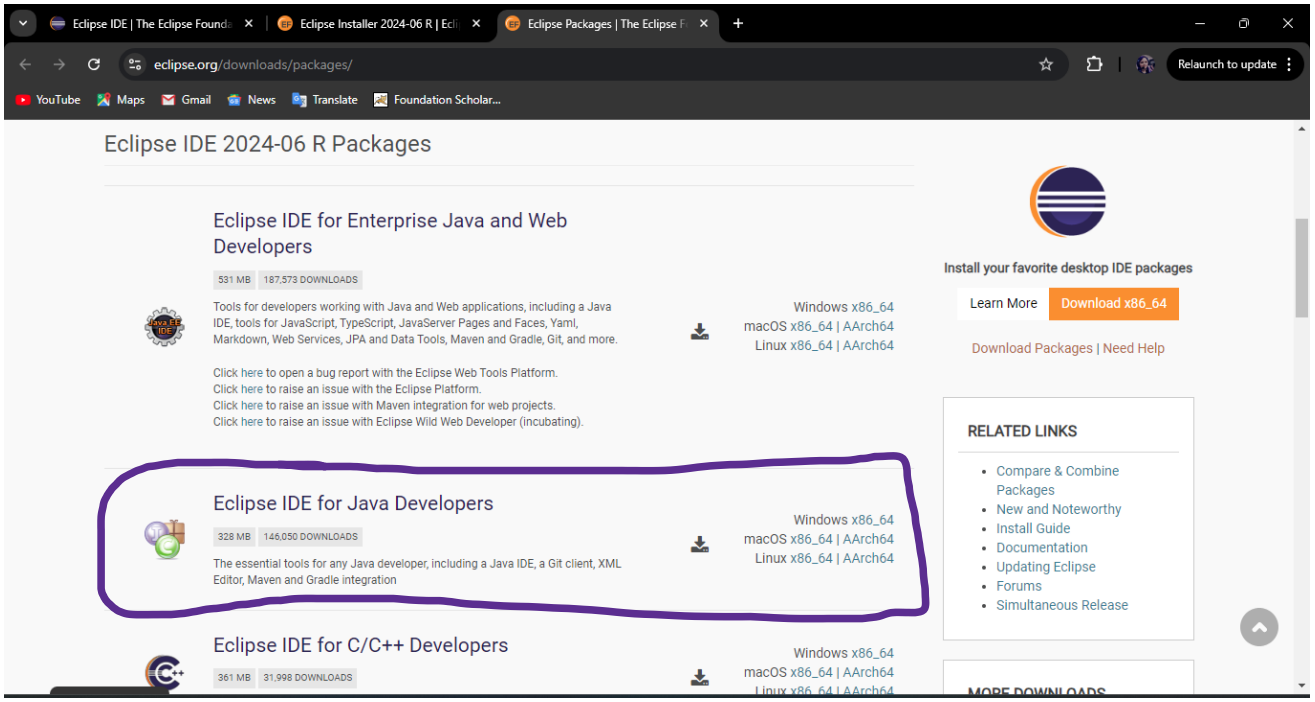




d. Click on the **package download tab**, which will open you into a new window.

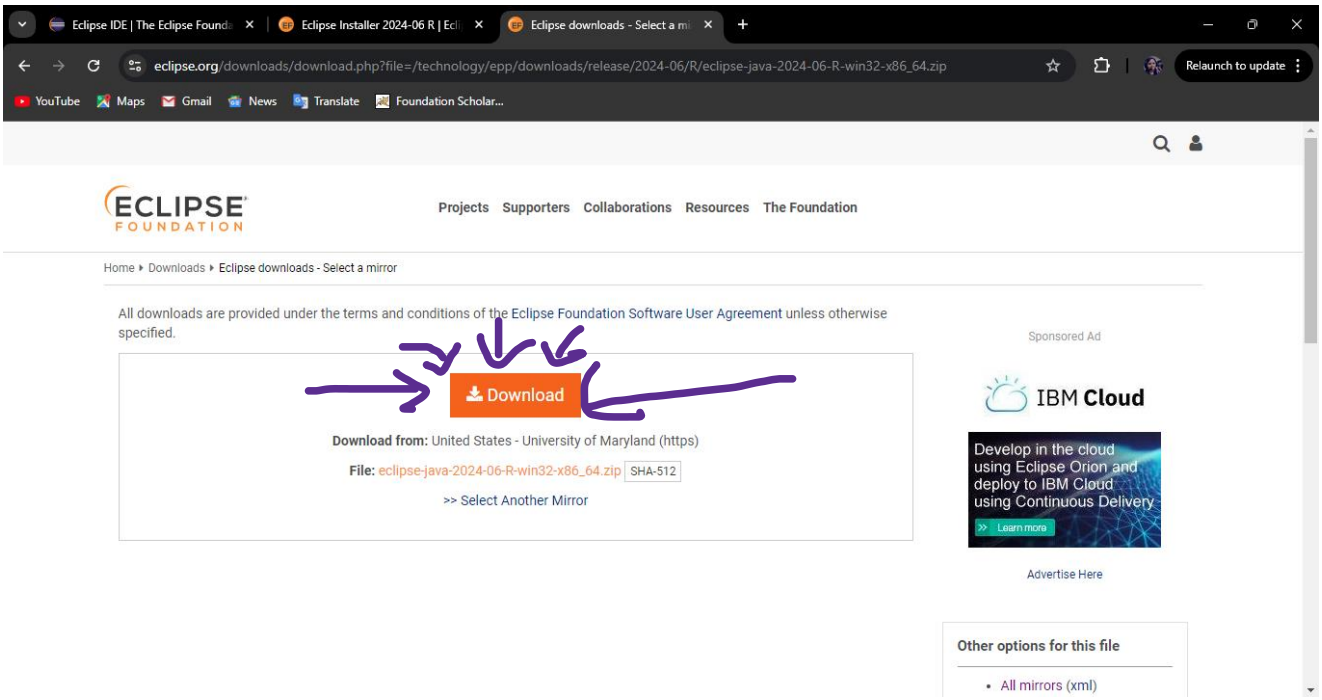
4. Scroll till you find a list of IDE packages, then Select **Eclipse Java IDE for developers.**



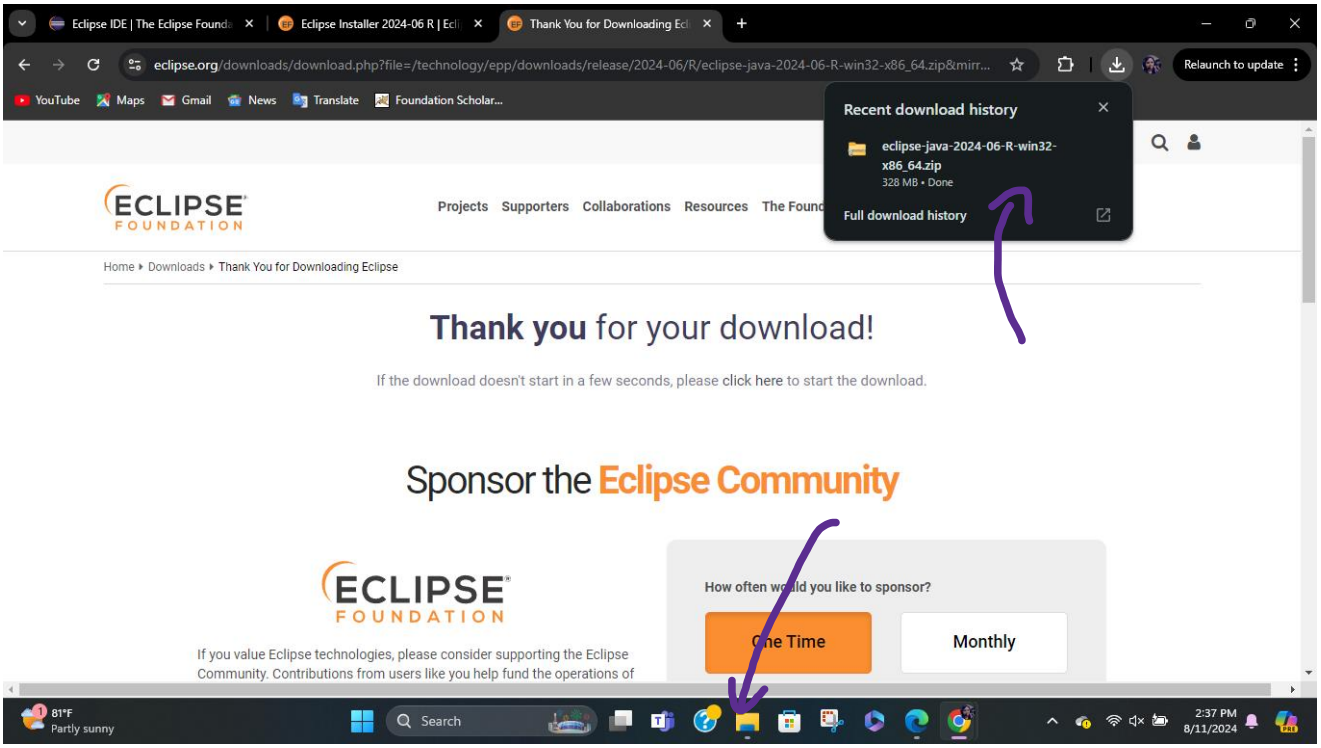


5. Select the correct download file for your machine.
    a. Windows *(This is the one that I'll be using)
    b. MacOS
    c. Linux

6. Click a big download button wait for a little bit….

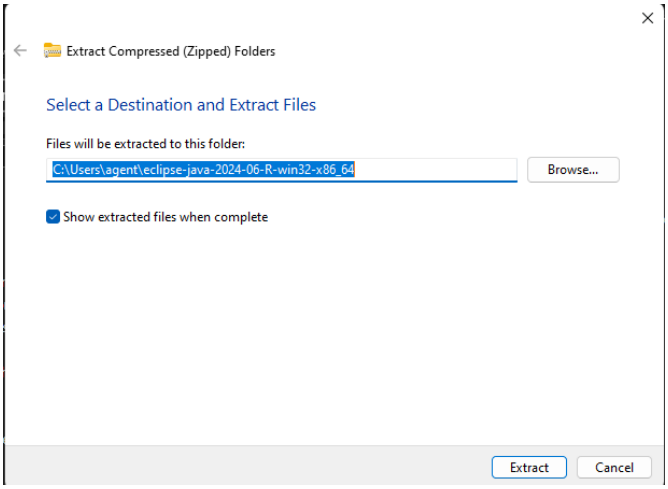


a. **Windows users** will download as a **zip file** so open task manager, or the pop-up saying it's been downloaded.



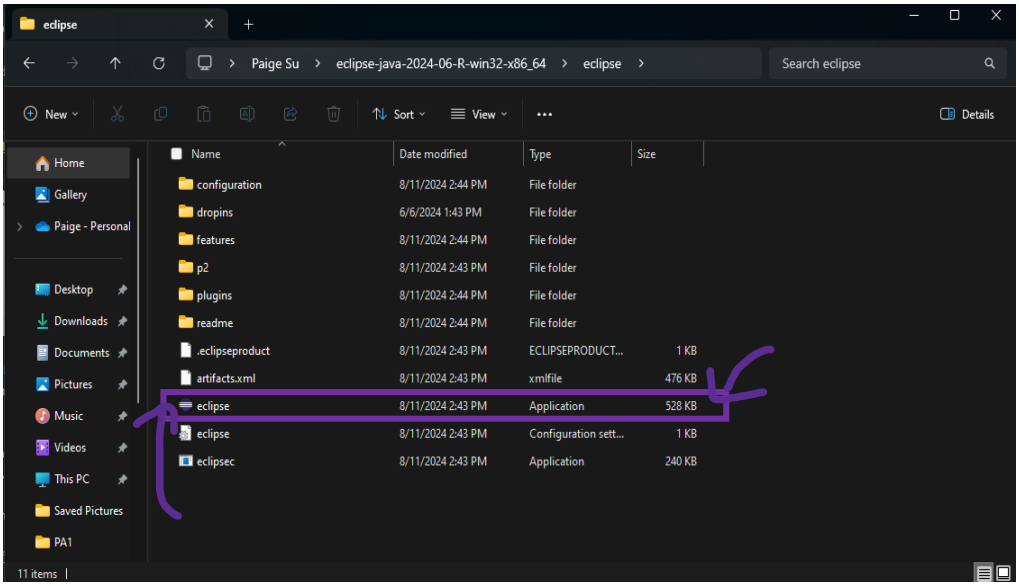
7. Select the file (in task manger the yellow folder thing) and **right click** and find the option that says to **extract all.** (This is going to vary from person to person but save it in a way where you can find it or make it have its own folder to find this easily later.)

8. (When asking where it wants to be stored let use the **default location** it wants) (just click **okay/Extract** when this file becomes present). Wait a little bit for all the files to be uploaded.



9. When the folder is done extracting click the newly extracted folder (**go inside of it**).
   - Some computers might open this automatically others you may need to go search for the file

10. Once inside the folder, find the **Eclipse application**, it should look like a **big blue circle** or say **Eclipse.**



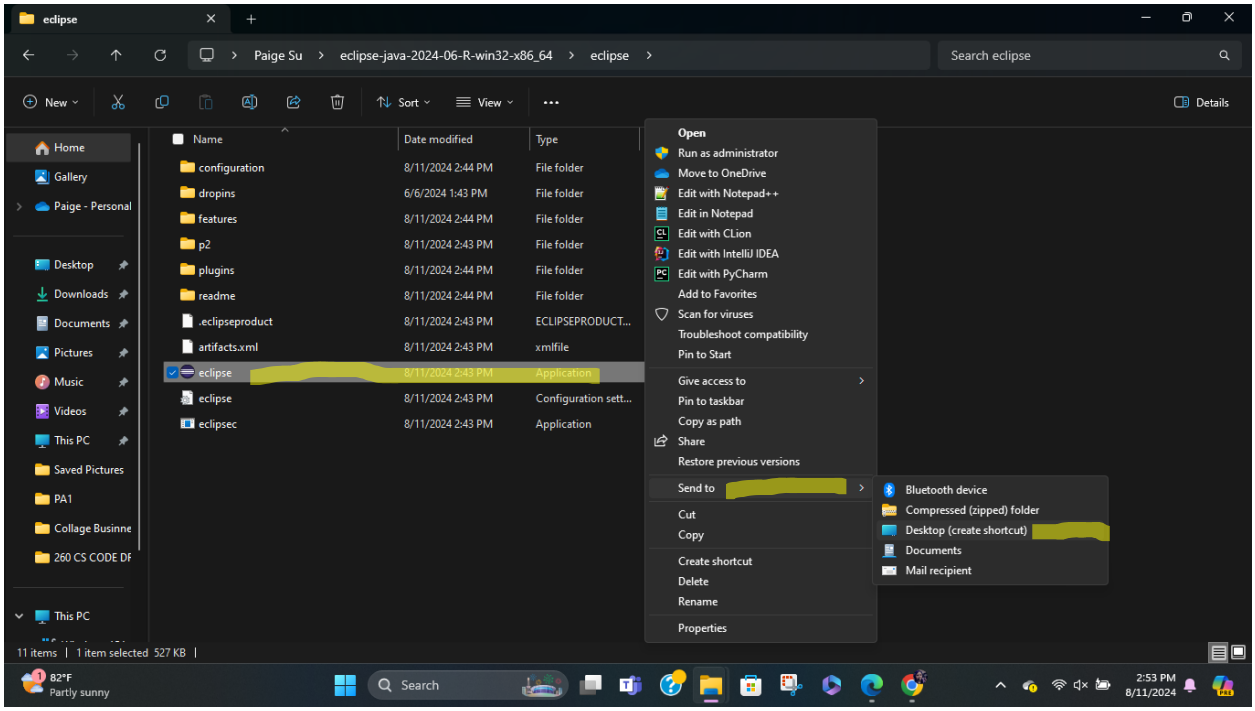
11. You can then use this to launch the IDE environment.

- <u>Better for convenience Create a Desktop Short Cut</u>
    i. Right click the Eclipse blue circle.

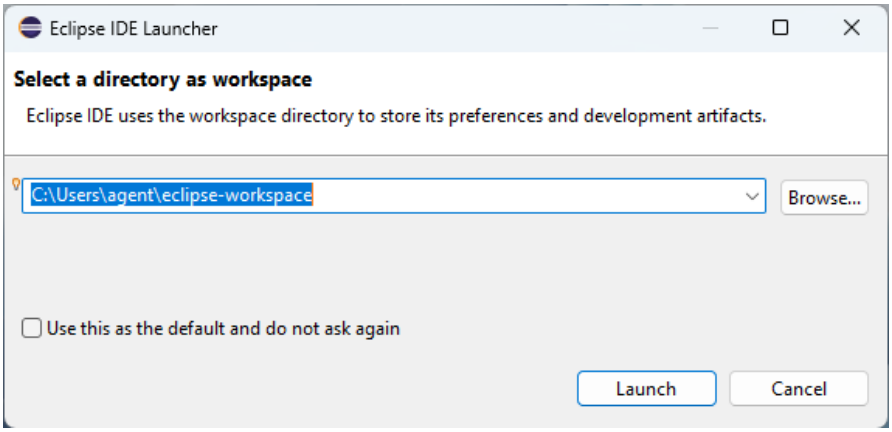
- Click more options if step two is not initially shown

ii. Find the option that is called "send to" ---> create desktop shortcut ----> click launch.

iii. This will then appear somewhere on your desktop, minizine your window and double check that it appears correctly.



12. Once downloaded, it is now time to open the application, you will be asked to make a new workspace using the **default option** that prefilled in and click the **launch button.**



13. This will open your developer. Some devices when opening this IDE will bring you to a welcome screen you can close out of by clicking an x near the top of the page that kind of looks like a tab bar (Read it the first time as it does contain useful information).

Creating you first Java project

14. Now that Eclipse is running you will see the IDE environment. (Don't panic if you can't type any code yet, just keeping reading on pls, - Your Wonderful TA)

- (Its default is light mode, for you people who are monsters you can keep it like that, or after setting everything up, at the end of the document are instructions on how to join Darkside.)

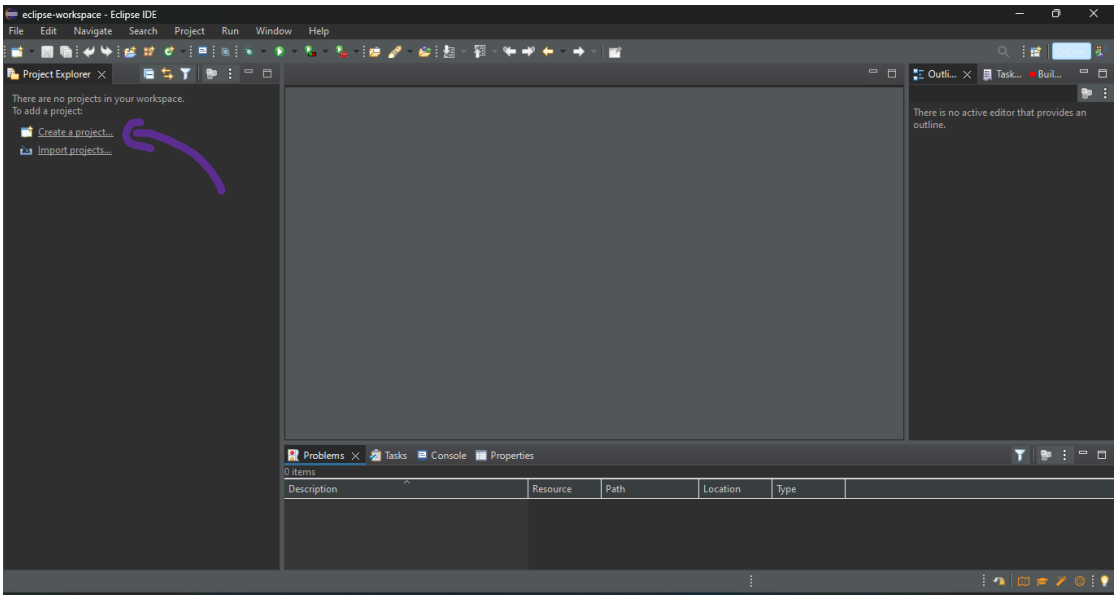
15. Navigate to your java project (which will be located on the side) and select **create a java project**

a. ***IF THIS IS MISSING ***

i. Go to **File** (in the very top)

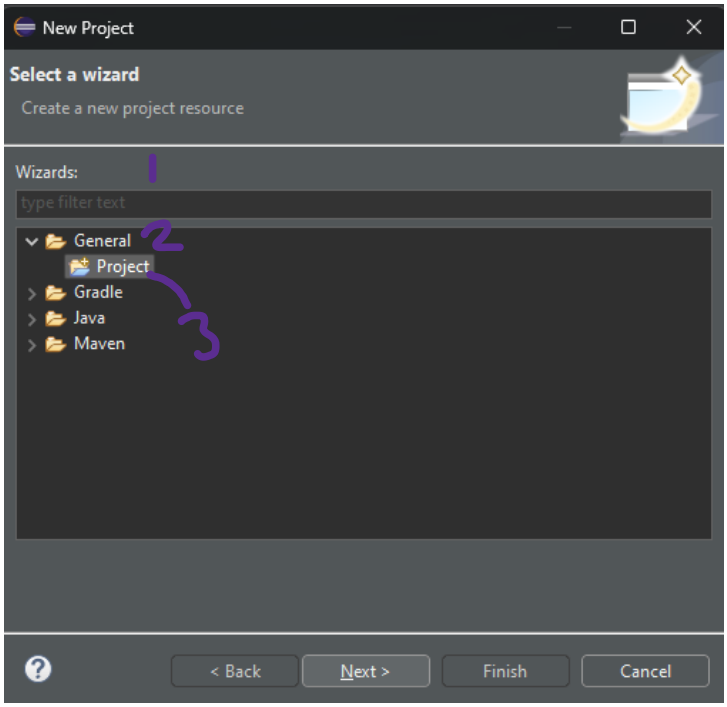
ii. **New** (hover over it for a menu to appear)

iii. Click on **Java Project** (Should be the first one at the top)



b. (**If you have eclipse already downloaded on computer this may happen, from different coding languages or version of IDE's**) Sometimes this may not show, and you will reach a screen that has select a **wizard option**, what you are going to do is select the G**eneral folder**, opening a drop-down menu. Click on the word **Project**, and finally click the word N**ext** at the bottom of the screen.

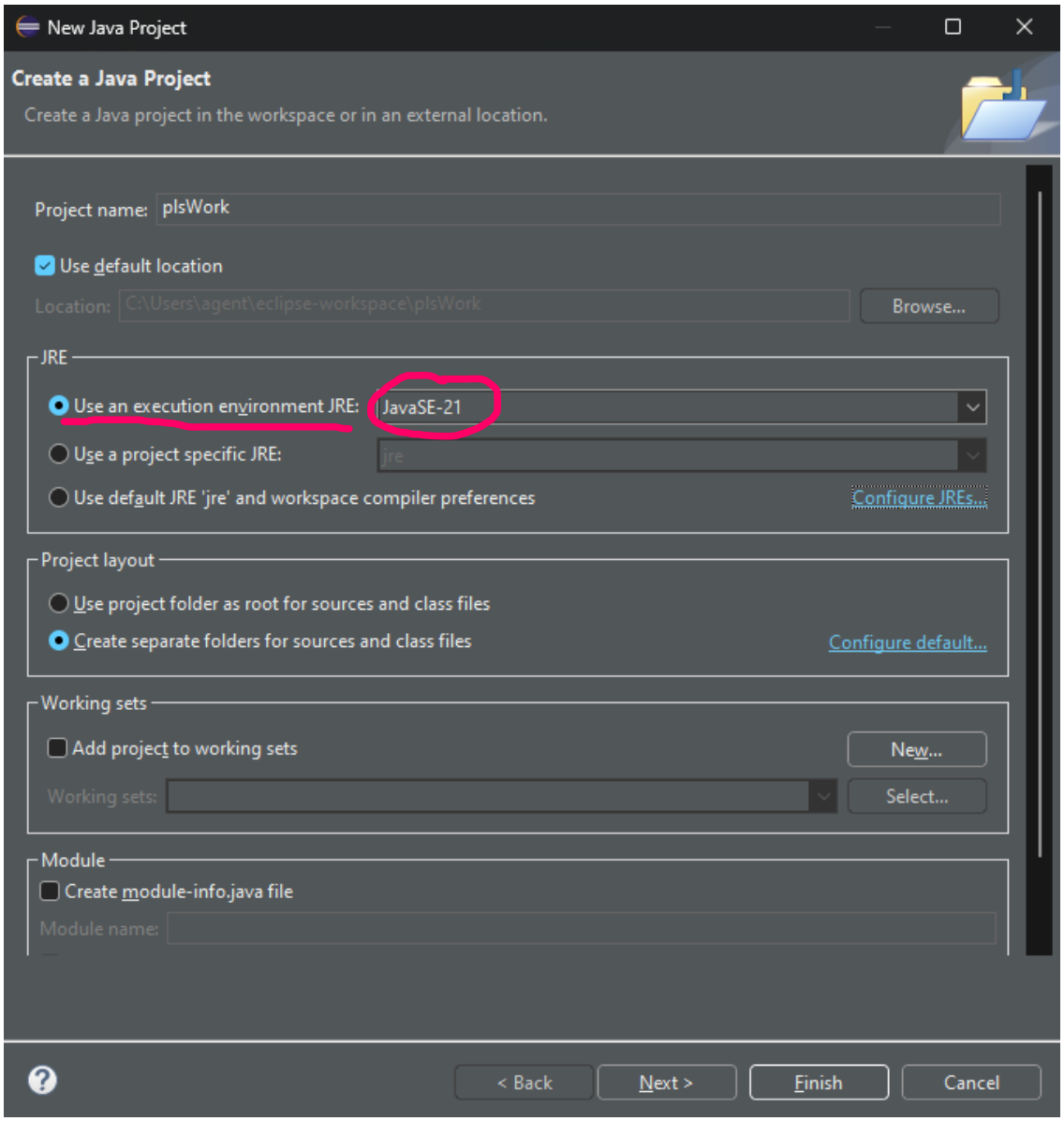
i. This normally happens the very first time when creating a project if you have eclipse for a different language, you may need to make a few random test ones for the IDE files to properly load in for the right language you want.



16. (*First time ever downloading eclipse*) You will be opened to a menu that has a bunch of options for creating your project, firstly make a name for your P**roject** that you will understand for example "MyFirstJavaProject", "Test_Frist_Project" etc....., click the **finish** button when you are done.

17. Next, we will want to configure the JRE (Java runtime environment), this will be downloaded with the JDK as they are embedded in within each other. You will see some items that have already been filled in **DO NOT CHANGE THESE LEAVE THEM AS THEY ARE!!!!!!!**

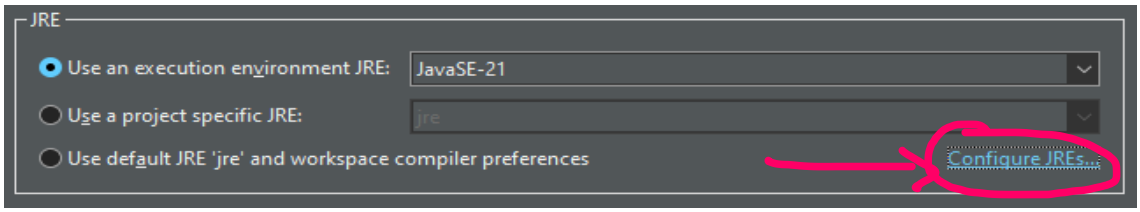
- Look to find the option called **Use an execution environment JRE** and off to the side you will see a **drop-down box** where you can choose what version of java you want to code.



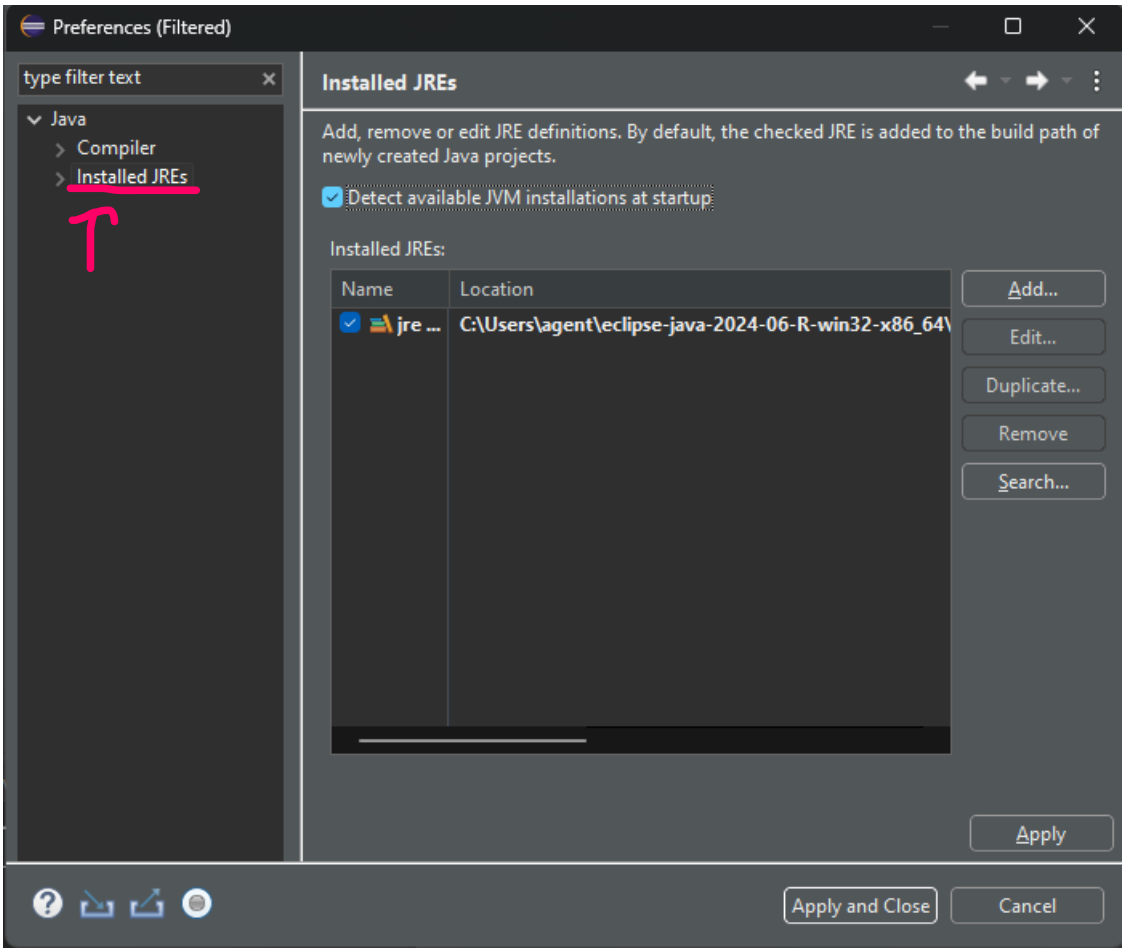
- As a good rule of thumb for this class use **JAVA 8 or higher**. Unless specified by Dr.Yu

    - Side Note: if you are having a problem while coding something from the textbook double check the version that you are using, as some of the most updated java version may not support older stuff in the textbook. Worse Case copy all the code you have written and make a new project file with a different version to see if that fixes the problem. Else please reach out for help from friends, TA's, or the prof.

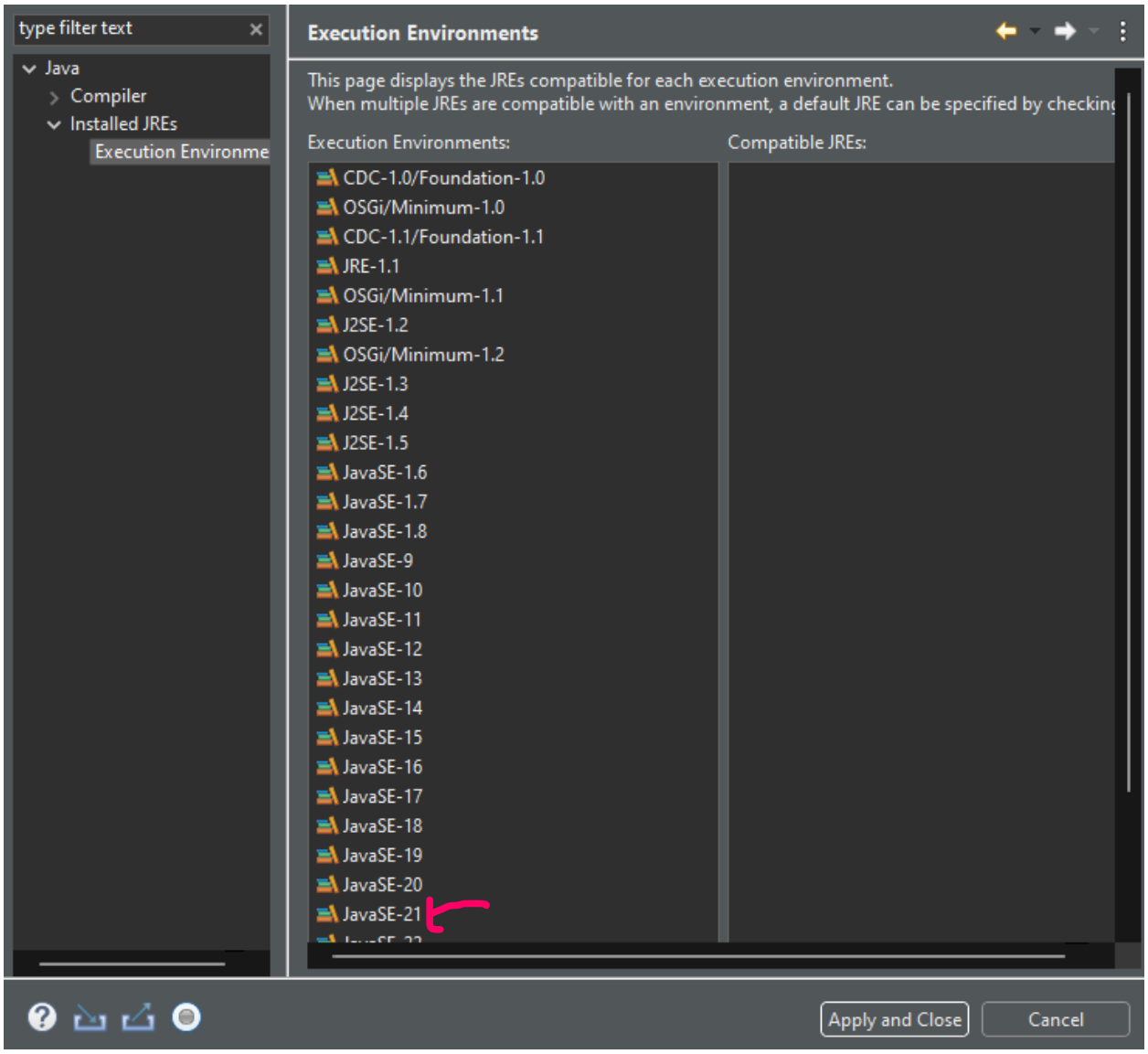
18. Right below the **two drop down** boxes you will see the word **configure**, **click that**. Which will open you to a new menu.



iv. When the new menu window opens, you are going to look for the word **Installed JREs** which will be on the left side, click this and open a drop-down menu.



v. Click on the **Execution Environment Tab,** and find **JavaSE-21,** click on it.



vi. Then in the **compatible JRE's side** select the box to be a **check mark, then** click **Apply and Close.** This will bring you back to making a project menu.

vii. Click the word "finish" at the bottom of the making a project menu.

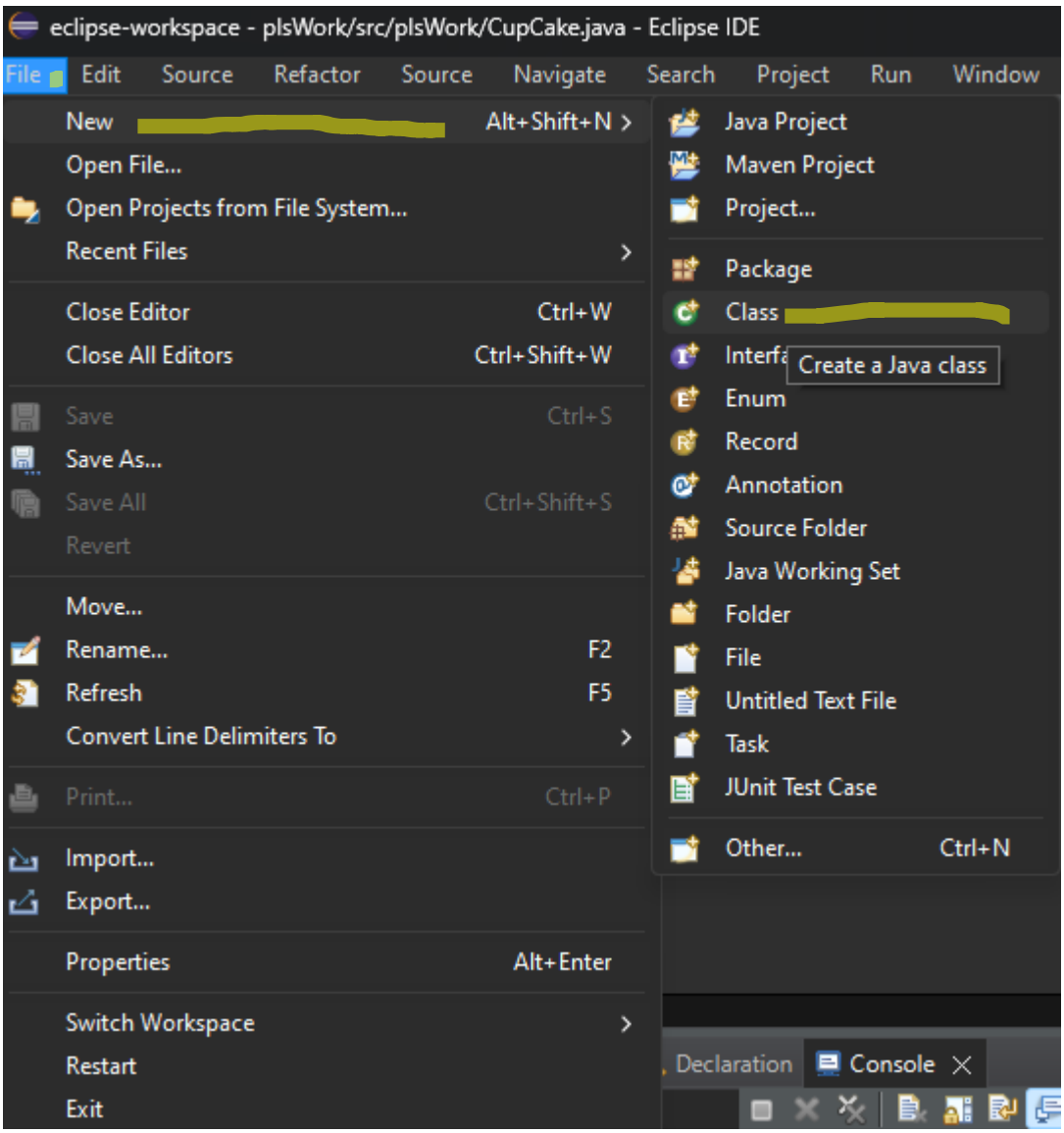
   i. ***Sometimes a new window will appear after hitting the word finish this is to create a module, which at this point you don't need to click on **"Don't Care"** option. ***

19. Now you will be back in the IDE environment, and on the side, you will see a project called "MyFristProject" or whatever you named your file. This will be how your code files will be stored in this IDE.

Adding a Class to your Project

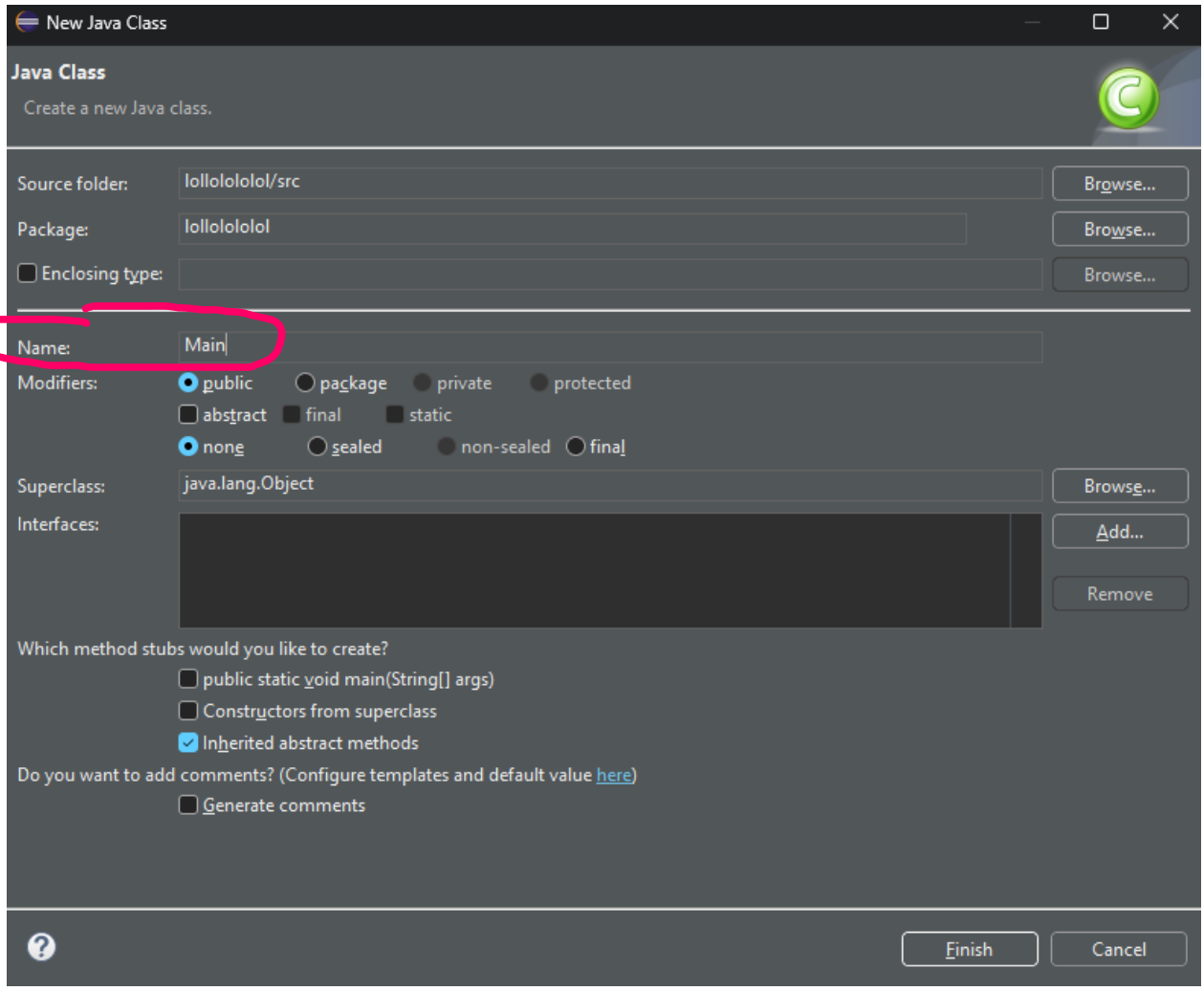
20. Select the project folder that appears on the left-hand side of the screen on the one you want to make a class for (should be highlighted).

    viii. Go to **File ---> New ---> Class**



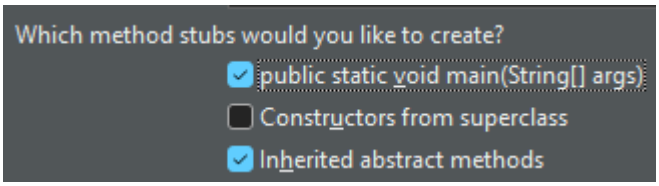
2. Here you will create your class, in the **box next to the word Name ***(NAMEING THIS IS VERY IMPORTION) *** (Don't change anything that has been pre-set!!!!).**

21. If this is your first class in a program always name, it **M**ain (This will be the class that makes everything run in your java code).



22. **Note:** the class name will always be capitalized, or an error will occur, each class name will also need to be unique from each other or the compiler will get confused, causing your program to not work. (This will become more apparent in CS 181).

23. Then find a section called **"Which method stubs would you like to create?** (The IDE will automatically create this for you, but you can also type this in by hand if it makes you happy).



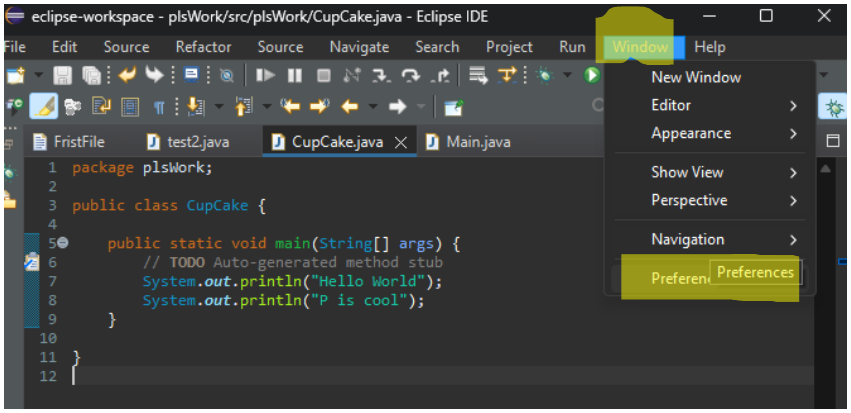
- Here you will selection the option " **public static void main (String [] args)** "
- While here, check that the "Inherited abstract method box" is also checked.

24. Then click the word **finish,** at the bottom of the window.

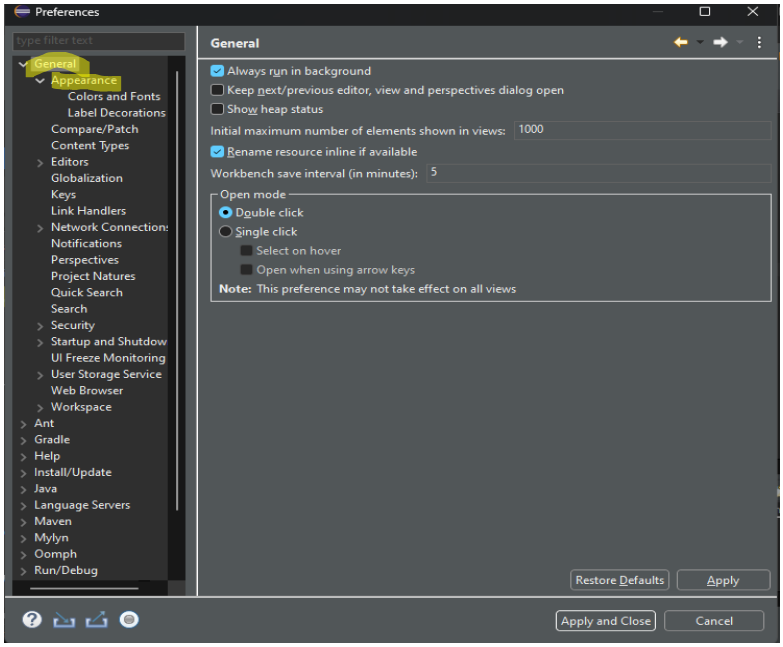
25. You will be brought back to the IDE developer environment, now you may begin coding, remember to save often and early (ctrl + S), or save by going through the file menu.

How to go to the Dark Side in Your IDE

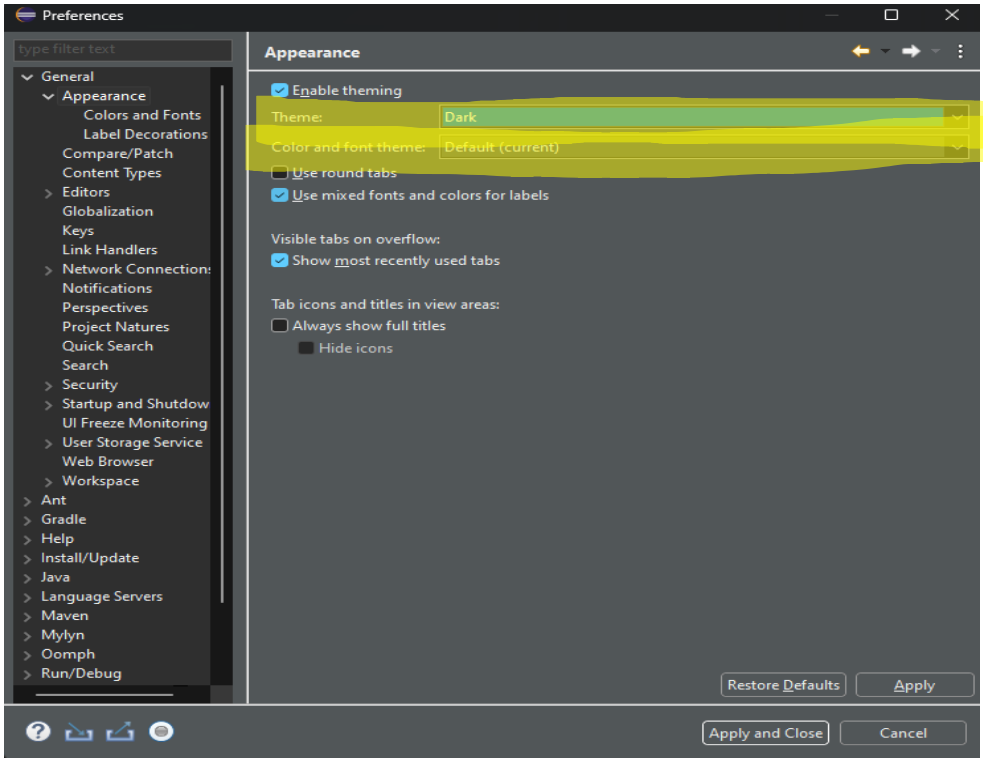
26. Click on the option **Window** in the top bar



27. Find the word **Preferences**, click that
28. Click on the **General Tab** to open the drop-down menu
29. Go to **Appearance,** click the literal word



30. Click the **Theme** drop down menu, pick the theme you like



31. Select **Apply**

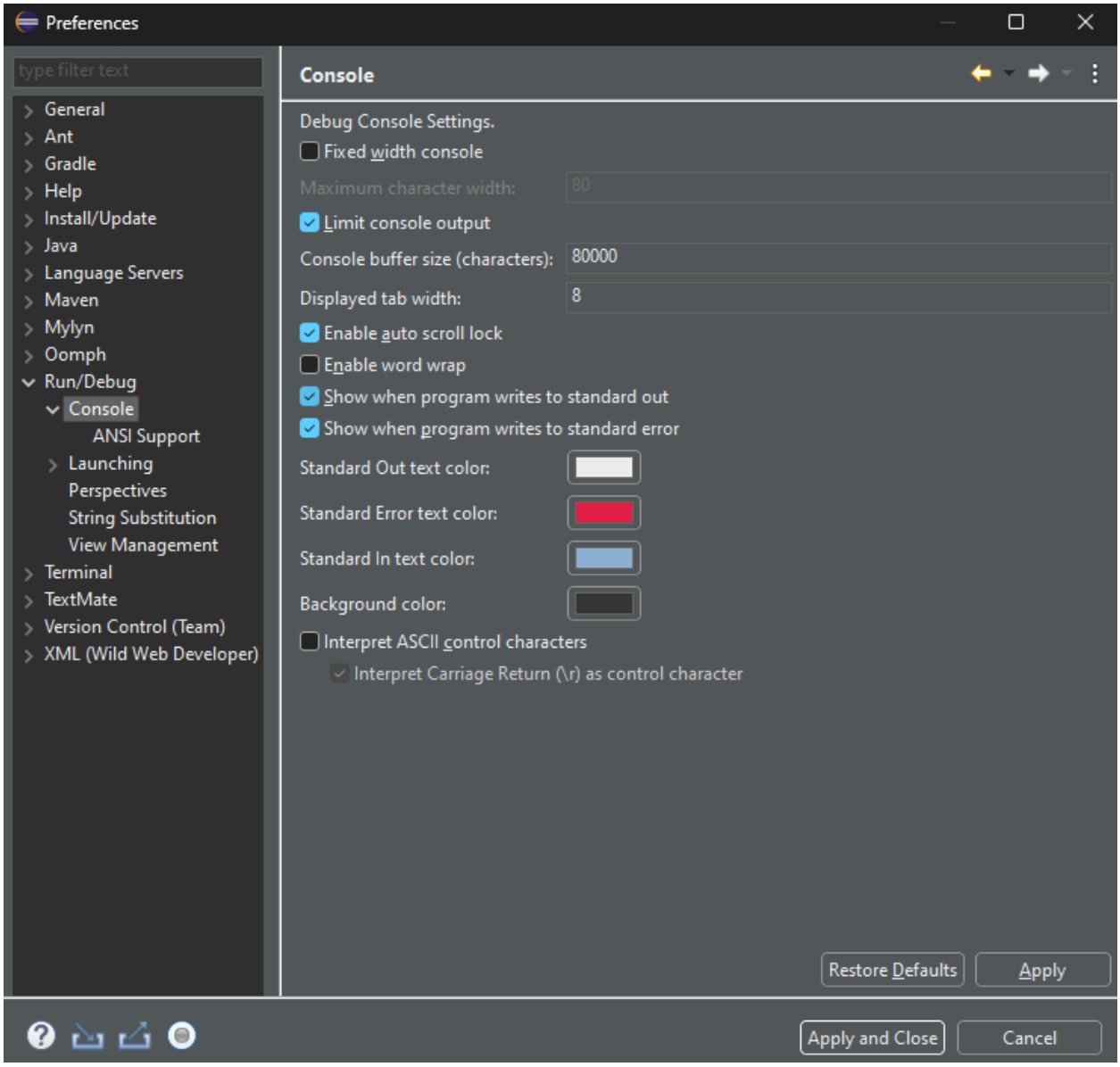
- **a.** If a second window appears select **okay**

32. Select **Apply and Close**, your new theme will automatically change in the background

Continues Below.....

How to Change the Color and Font of Text in your IDE Terminal /Console

33. Click on the option **Window** in the top bar
34. Find the word **Preferences**, click that



35. Go to **Run Debug.**
36. Click the word **Console** literally.
    a. Change your colors.
37. Click **Apply.**
38. Click **Apply and Close** (You may need to compile something to see the changes).

Testing print Statements to test if IDE is working Correctly

- When writing any code that is found within java the order of execution is from top down, meaning whatever is written at the top of the main method will get called and executed first regardless of where it is written in the program.

Example to print something out

```
public class Main {

    public static void main (String [] args){

      //code to be written here

      System.out.println(“Hello World”);

    }

}
```