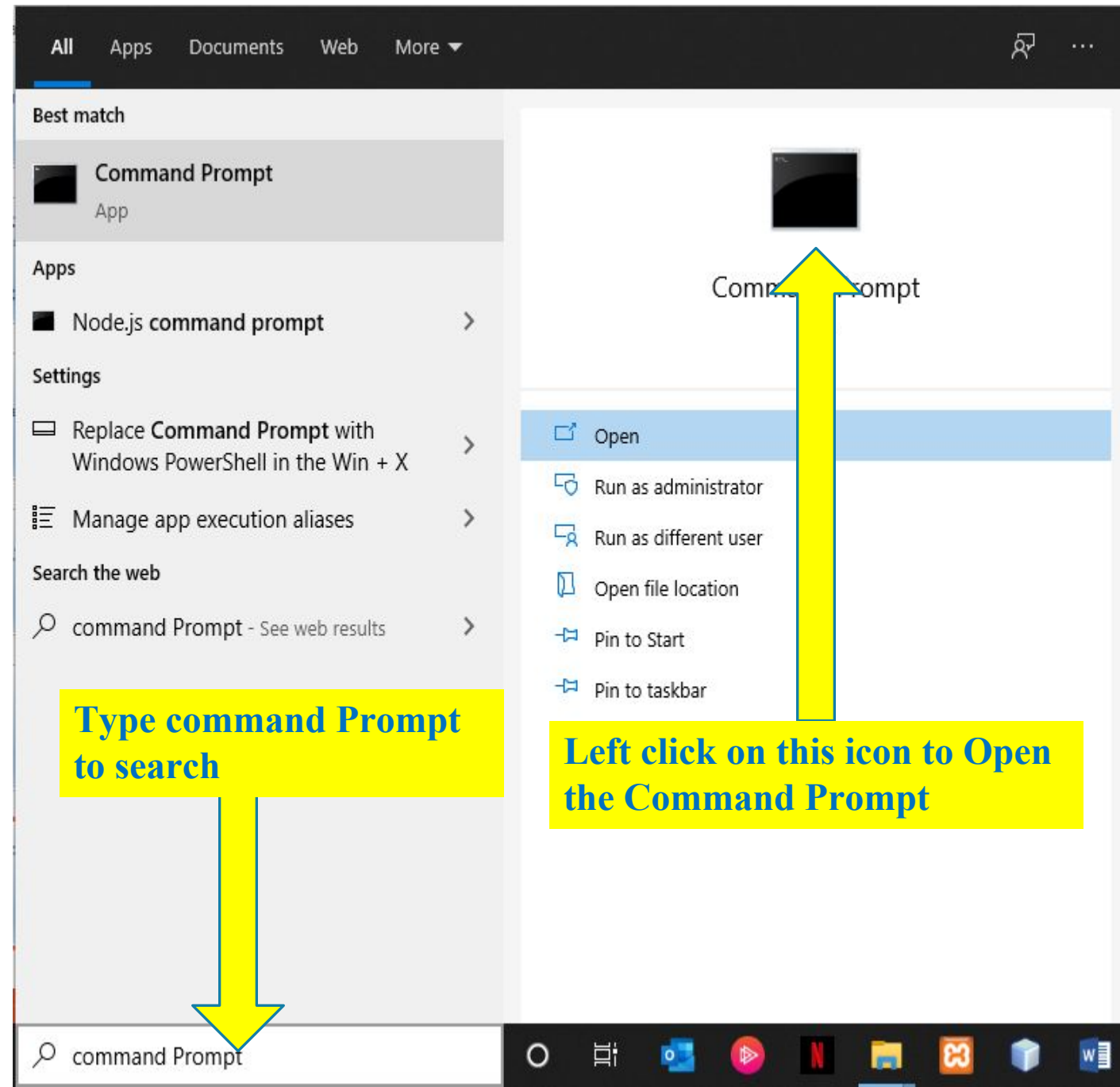


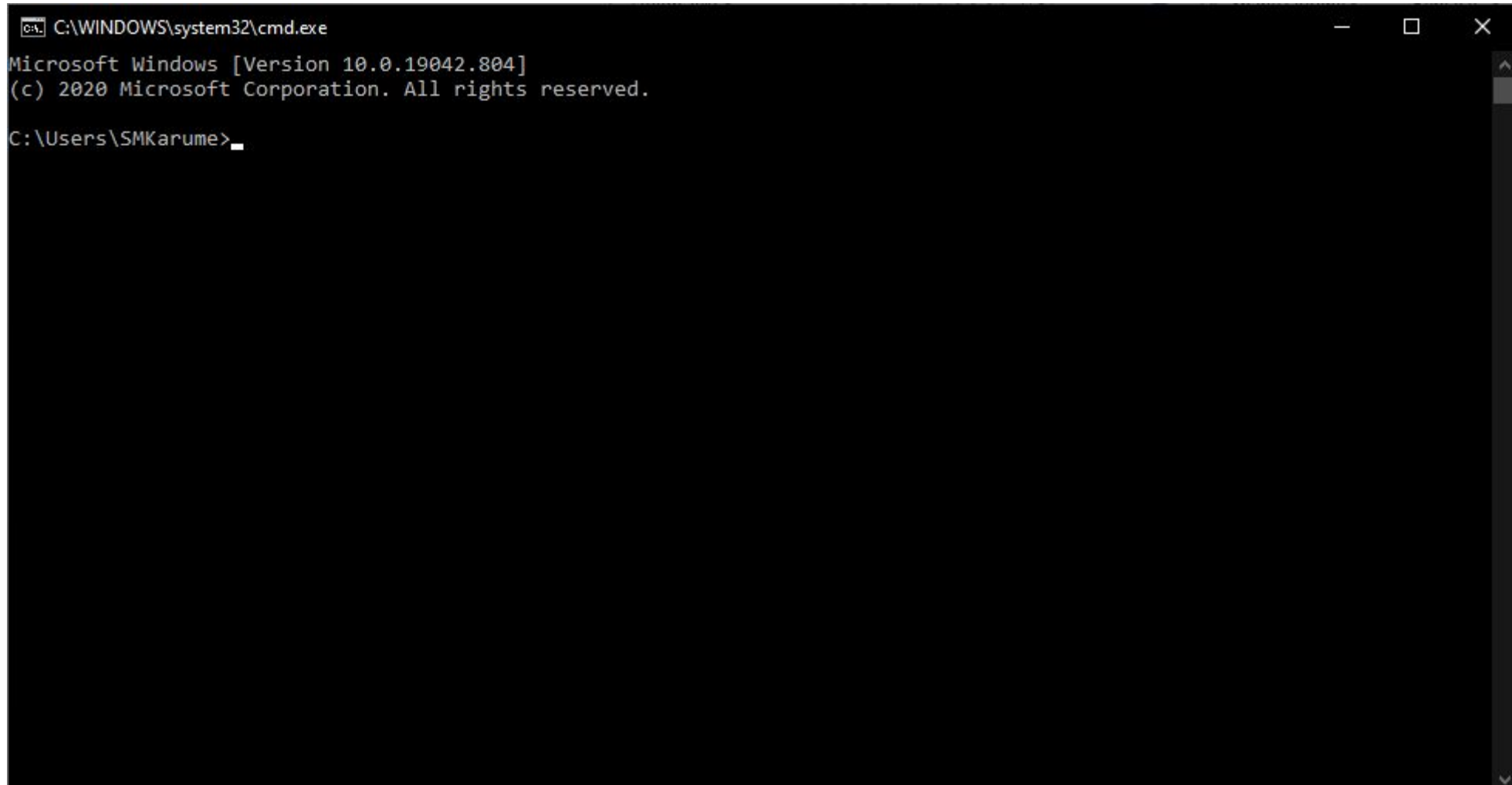
# WINDOWS OPERATING SYSTEM

---

1. Go to the bottom left of your screen and click on the search tab.
2. Type in command prompt and you should be able to see such a screen shown alongside
3. Open the command prompt by either pressing enter on your keyboard or by left clicking in the icon.



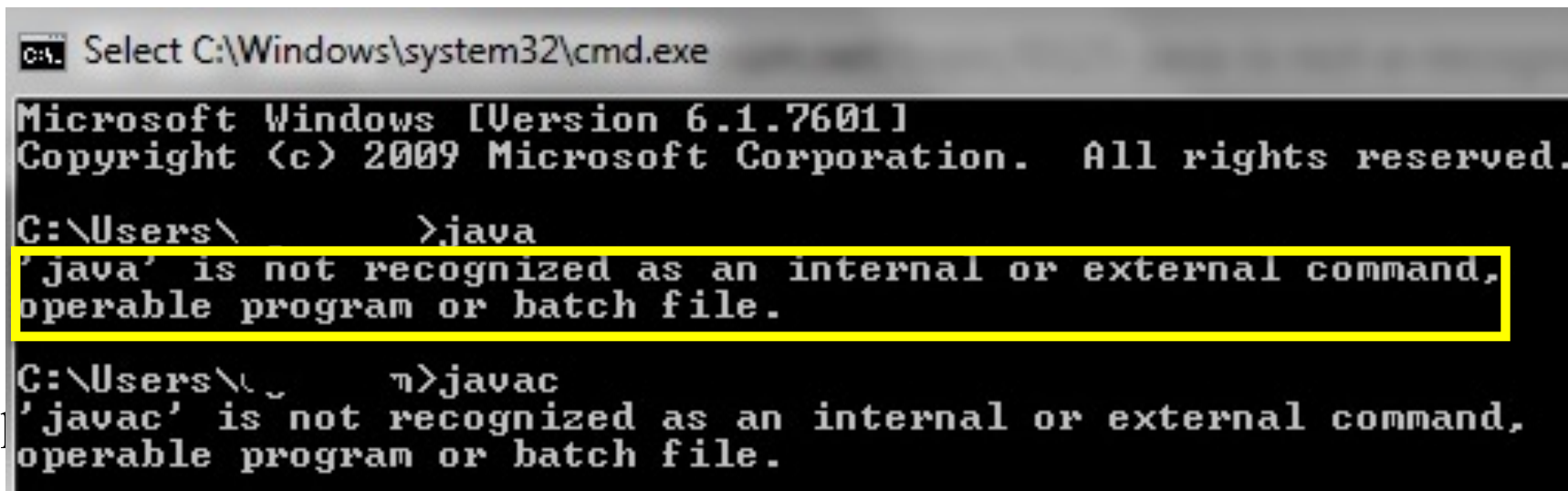
On clicking the icon the command prompt window will open.  
(As shown below)

A screenshot of a Windows Command Prompt window. The title bar at the top shows the file path "C:\WINDOWS\system32\cmd.exe" and standard window controls (minimize, maximize, close). The main area of the window is black with white text. It displays the Windows version "Microsoft Windows [Version 10.0.19042.804]" and copyright information "(c) 2020 Microsoft Corporation. All rights reserved." Below this, the current directory is shown as "C:\Users\SMKarume>". A white cursor is positioned at the end of the prompt line.

```
C:\WINDOWS\system32\cmd.exe
Microsoft Windows [Version 10.0.19042.804]
(c) 2020 Microsoft Corporation. All rights reserved.

C:\Users\SMKarume>
```

1. On the command Prompt type in the command Java and press enter
2. If you receive a message as the one highlighted below then Java is not installed in your computer



```
c:\> Select C:\Windows\system32\cmd.exe

Microsoft Windows [Version 6.1.7601]
Copyright (c) 2009 Microsoft Corporation. All rights reserved.

C:\Users\>java
'java' is not recognized as an internal or external command,
operable program or batch file.

C:\Users\>javac
'javac' is not recognized as an internal or external command,
operable program or batch file.
```


To solve this fol



# **DOWNLOADING AND SETTING UP THE JAVA DEVELOPMENT KIT (JDK)**

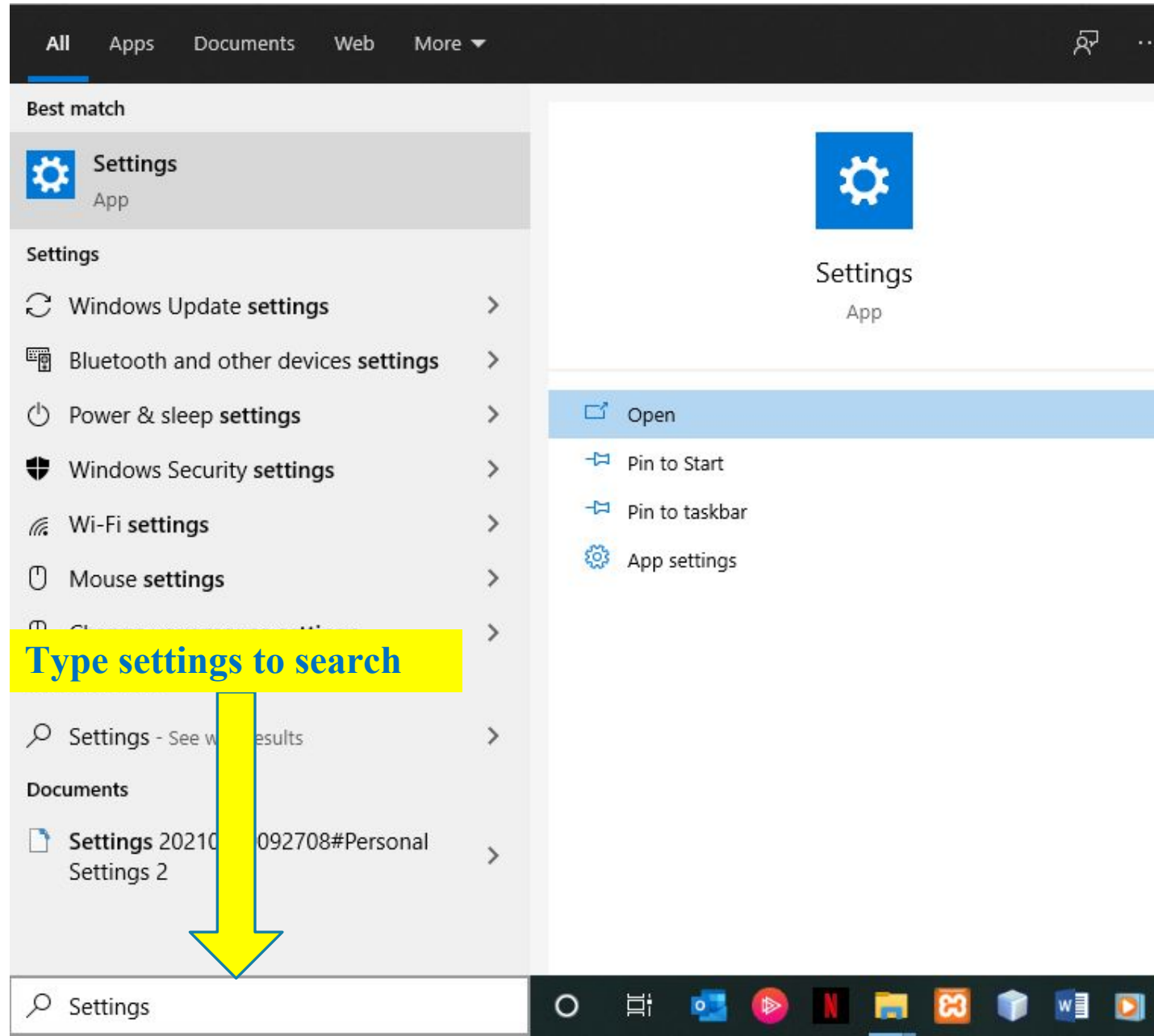
## !!! Before You download !!!

- Check the Operating System Version that Your Computer Is Running So that You Don't End Up Running The Wrong JDK Version...
  - There are Two Possible Outcomes... Its Either...
- 1. Your computer runs a 64-bit Operating System or**
  - 2. Your Computer Runs a 32-bit Operating System.**



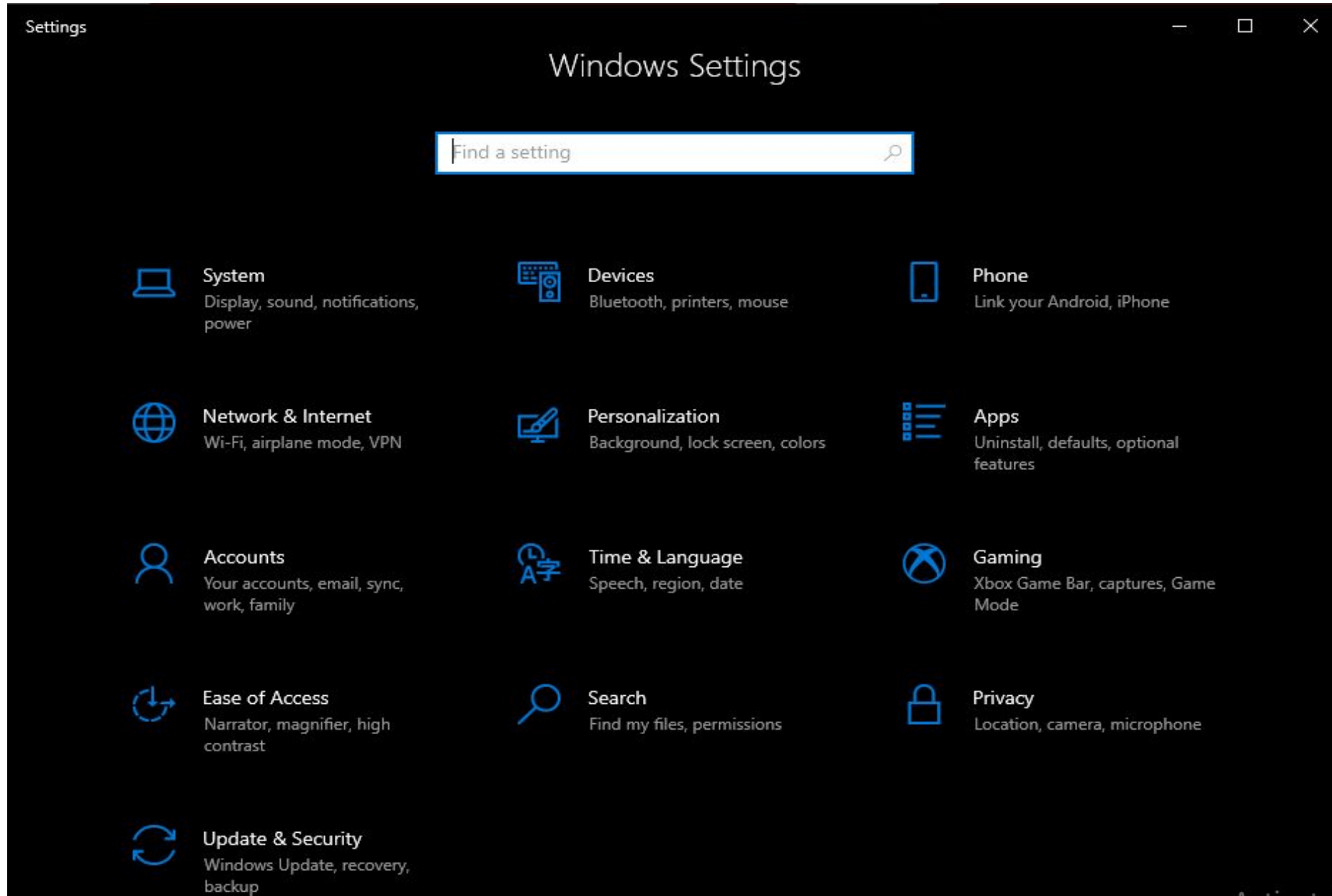
**TO CHECK THE OPERATING SYSTEM VERSION YOUR  
COMPUTER IS RUNNING, THERE ARE SOME STEPS  
TO BE FOLLOWED...**

## **STEP 1: GO TO THE SEARCH PANEL AND SEARCH FOR THE CONTROL PANEL**

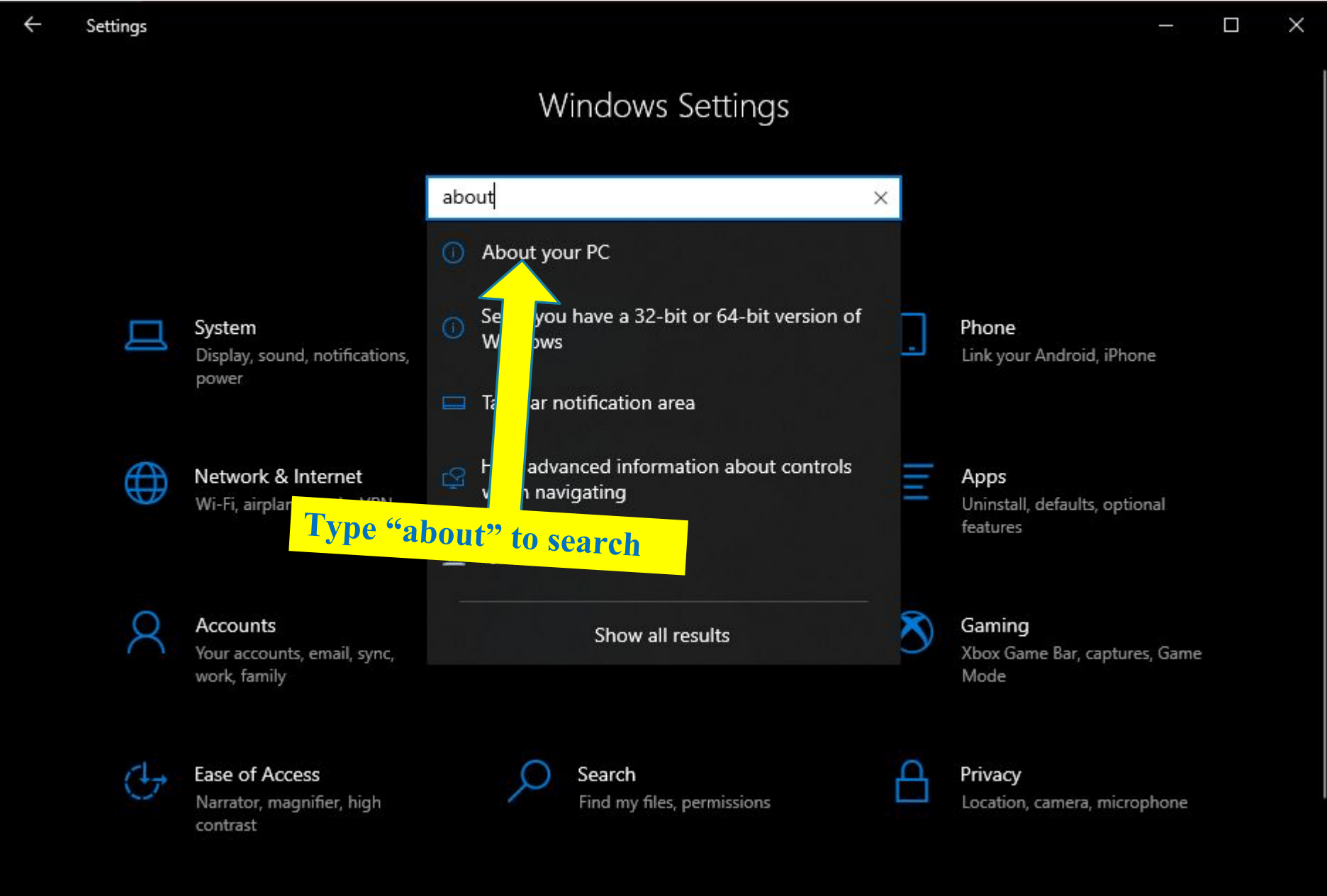




**STEP 2** : Click on the Icon to open and a window such as the one shown below will appear



**STEP 3**: On the search panel on the settings window type in “About your pc” and click on the option provided.



**STEP 3:** On the window that opens next check your systems specifications as shown

← Settings

Home

Find a setting

System

Display

Sound

Notifications & actions

Focus assist

Power & sleep

Battery

Storage

Tablet

Multitasking

Projecting to this PC

About

Your PC is monitored and protected.

[See details in Windows Security](#)

Device specifications

Device name	DESKTOP-TKGEGN0		
Processor	Intel(R) Core(TM) i5 CPU	M 540	@ 2.53GHz 2.53 GHz
Installed RAM	4.00 GB (3.80 GB usable)		
Device ID	7C6A0736-AAD9-4E1C-8666-ABBB2BA5DCB7		
Product ID	00329-00000-00003-AA891		
System type	64-bit operating system, x64-based processor		
Pen and touch	Pen support		

Copy

Rename this PC

Windows specifications

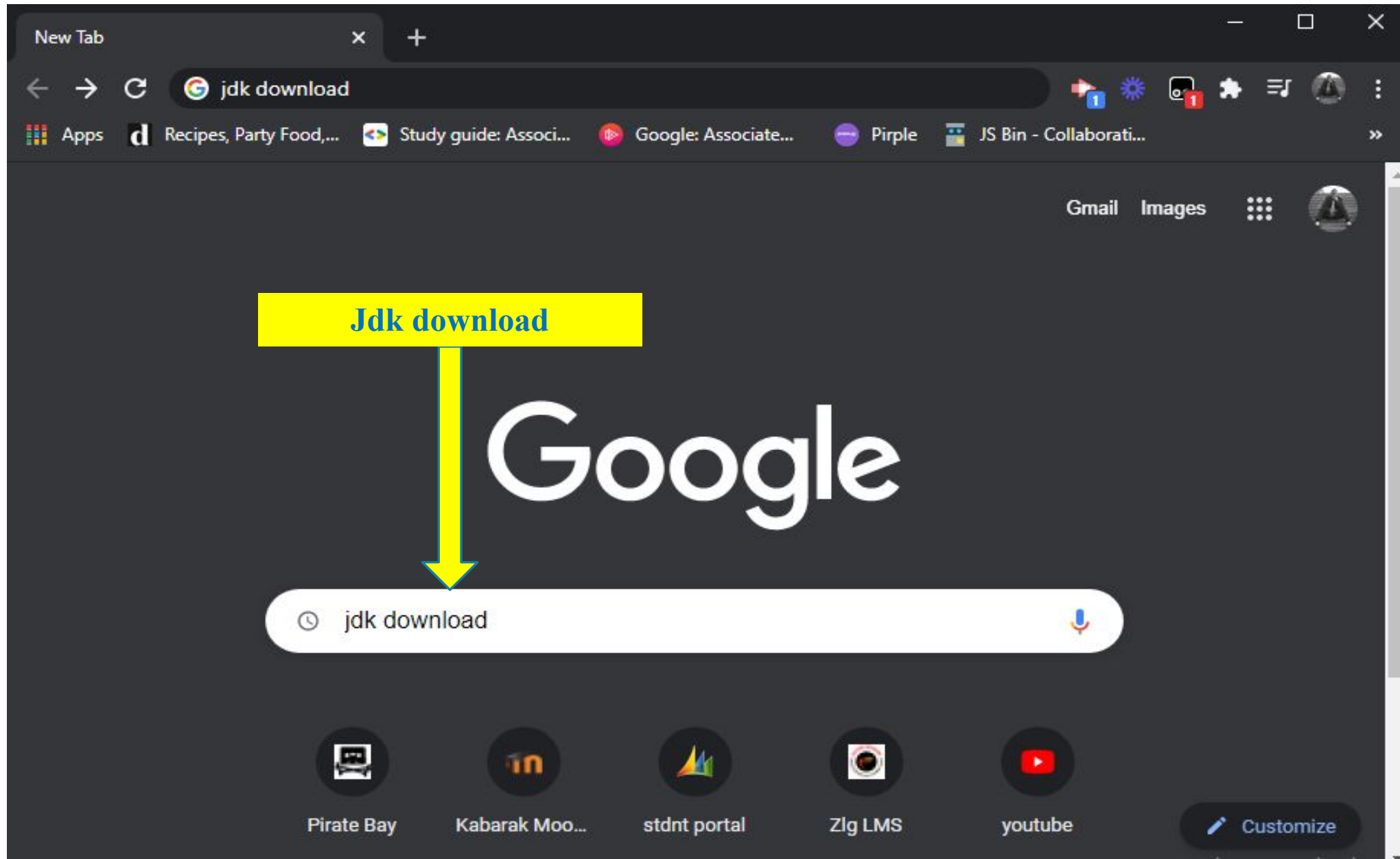
Edition	Windows 10 Enterprise
Version	20H2

OS version

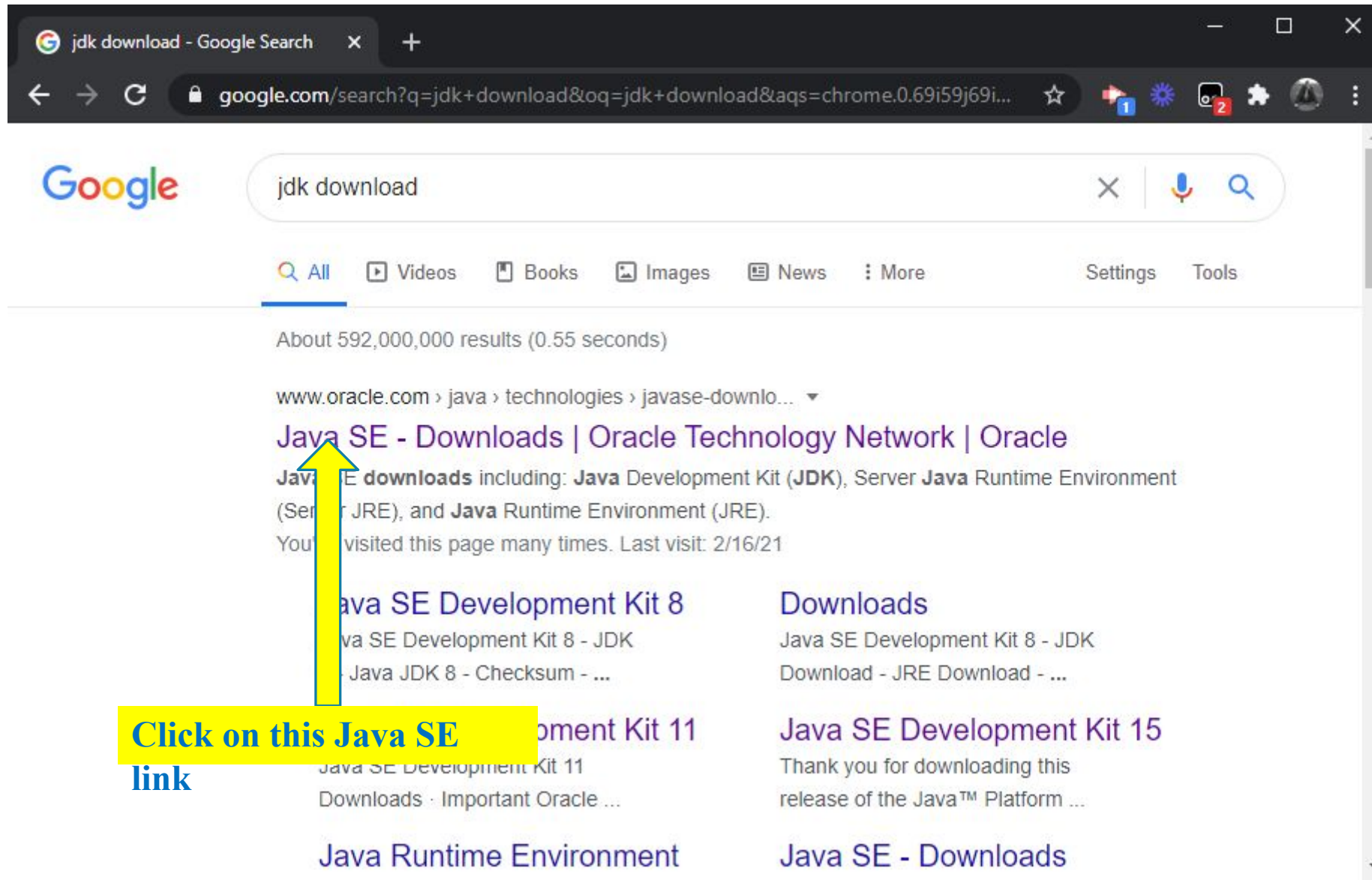


**Once you have confirmed your Systems version proceed to download the JDK using the steps in the slides that follow.**

**Step 1:** Go to your chrome Browser, or the browser you may have, and type in jdk download and press enter (shown below )

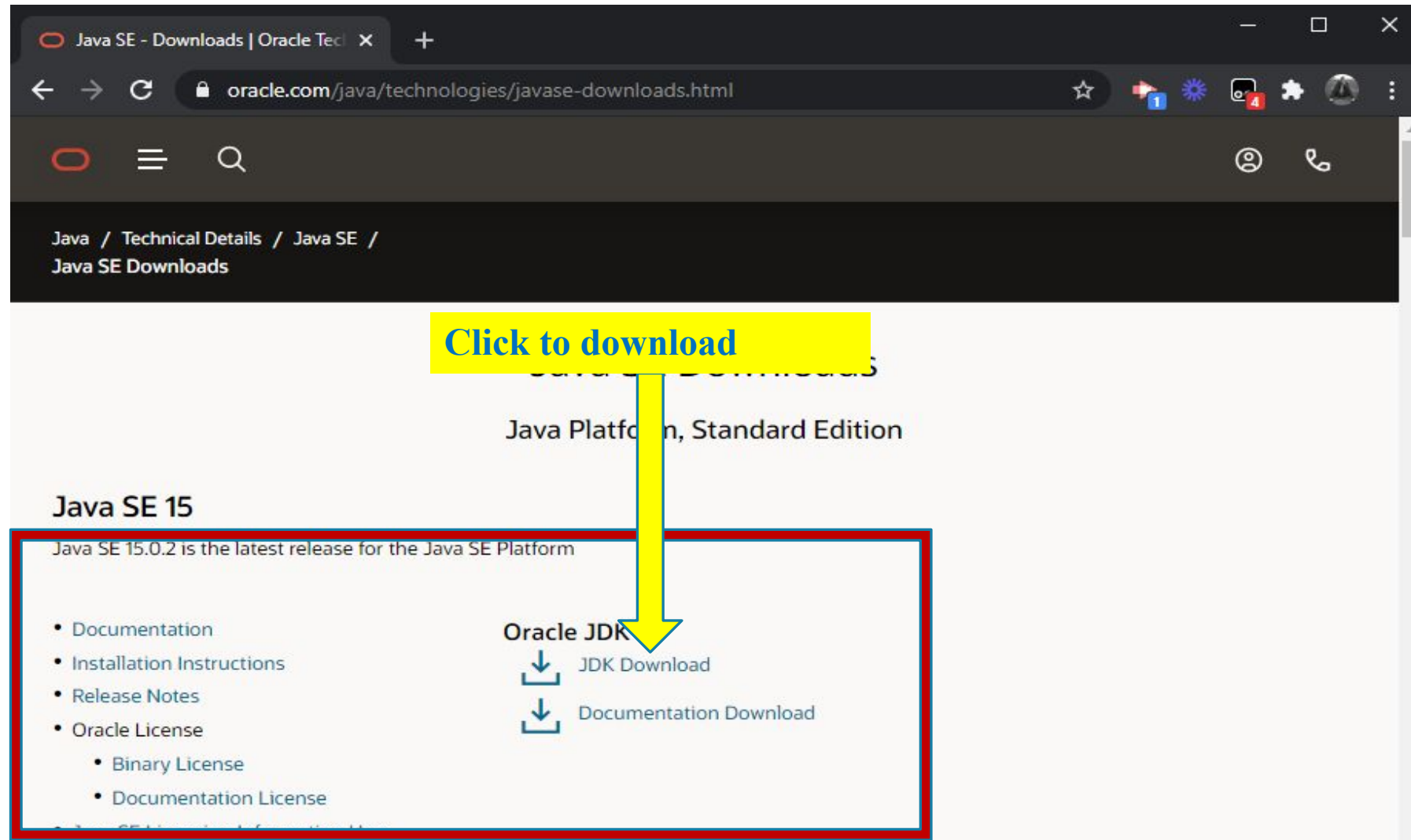


**Step 2:** On the results options provided click on the Java SE link provided by the Oracle corporation.



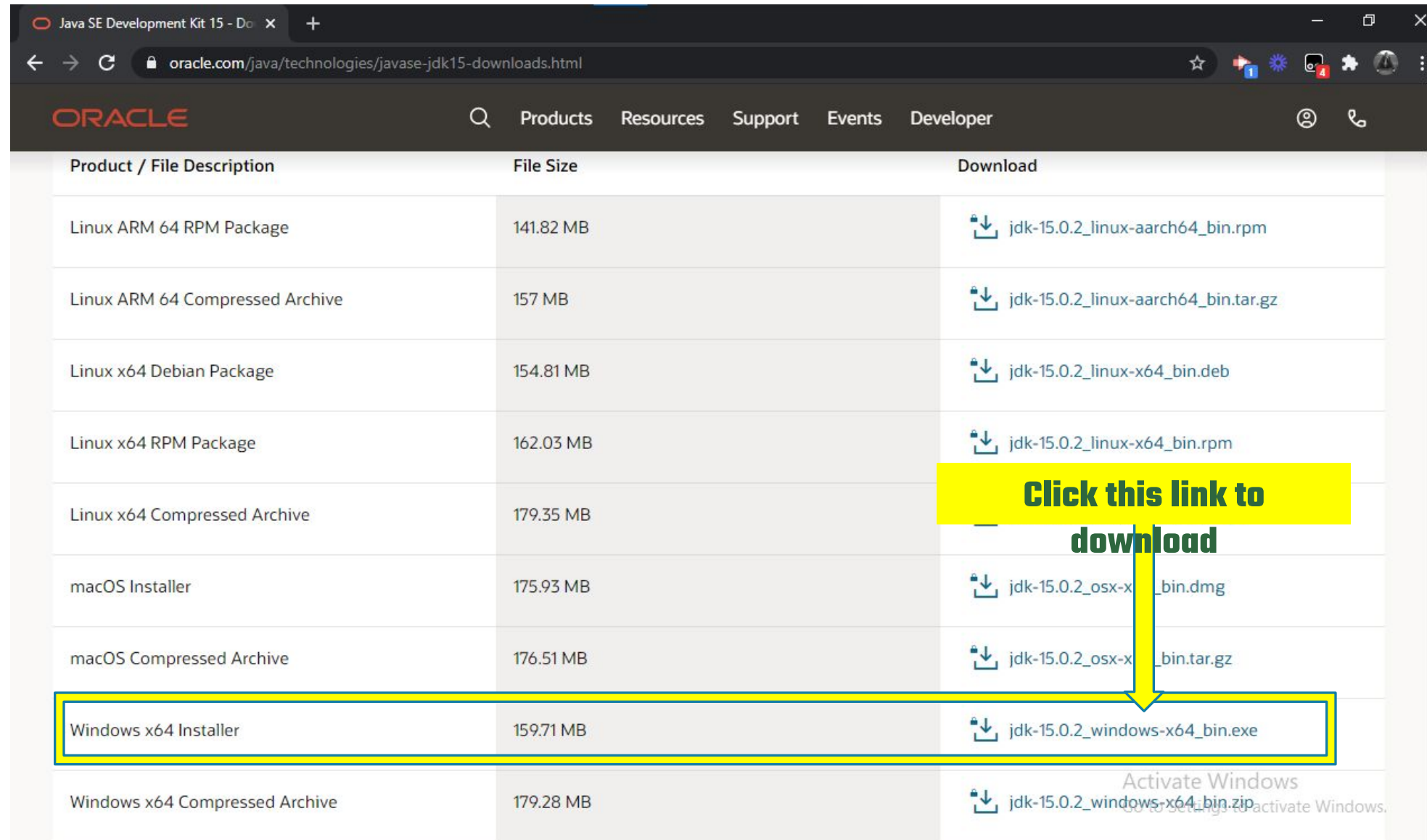
Once the Oracle Java SE website is open ensure you get to see Java SE 15. which is the latest release for the Java SE Platform

**Step 3:** Click on the JDK Download under Oracle JDK





**Step 4 :** On clicking the JDK download you'll be directed to another page where you get to select the installation file in accordance to your Operating System In this case click on the Windows \*64 installer .exe file to download



The screenshot shows the Oracle Java SE Development Kit 15 download page. The browser's address bar shows the URL `oracle.com/java/technologies/javase-jdk15-downloads.html`. The page features a navigation bar with the Oracle logo and links for Products, Resources, Support, Events, and Developer. Below the navigation bar is a table listing various download options for JDK 15.0.2. The table has three columns: Product / File Description, File Size, and Download. The 'Windows x64 Installer' row is highlighted with a yellow border, and a yellow callout box with the text 'Click this link to download' and a downward arrow points to the download link for this row.

Product / File Description	File Size	Download
Linux ARM 64 RPM Package	141.82 MB	<a href="#">jdk-15.0.2_linux-aarch64_bin.rpm</a>
Linux ARM 64 Compressed Archive	157 MB	<a href="#">jdk-15.0.2_linux-aarch64_bin.tar.gz</a>
Linux x64 Debian Package	154.81 MB	<a href="#">jdk-15.0.2_linux-x64_bin.deb</a>
Linux x64 RPM Package	162.03 MB	<a href="#">jdk-15.0.2_linux-x64_bin.rpm</a>
Linux x64 Compressed Archive	179.35 MB	<a href="#">jdk-15.0.2_linux-x64_bin.tar.gz</a>
macOS Installer	175.93 MB	<a href="#">jdk-15.0.2_osx-x64_bin.dmg</a>
macOS Compressed Archive	176.51 MB	<a href="#">jdk-15.0.2_osx-x64_bin.tar.gz</a>
Windows x64 Installer	159.71 MB	<a href="#">jdk-15.0.2_windows-x64_bin.exe</a>
Windows x64 Compressed Archive	179.28 MB	<a href="#">jdk-15.0.2_windows-x64_bin.zip</a>



**Step 5 :** Agree to the License agreement by checking the check box provided then click on download for the file to begin downloading

×

You must accept the Oracle Technology Network License Agreement for Oracle Java SE to download this software.

---

☒ I reviewed and accept the Oracle Technology Network License Agreement for Oracle Java SE

Download jdk-15.0.2\_windows-x64\_bin.exe 

**Click here to start the download**

Once the download is complete the installation file will look like the image below





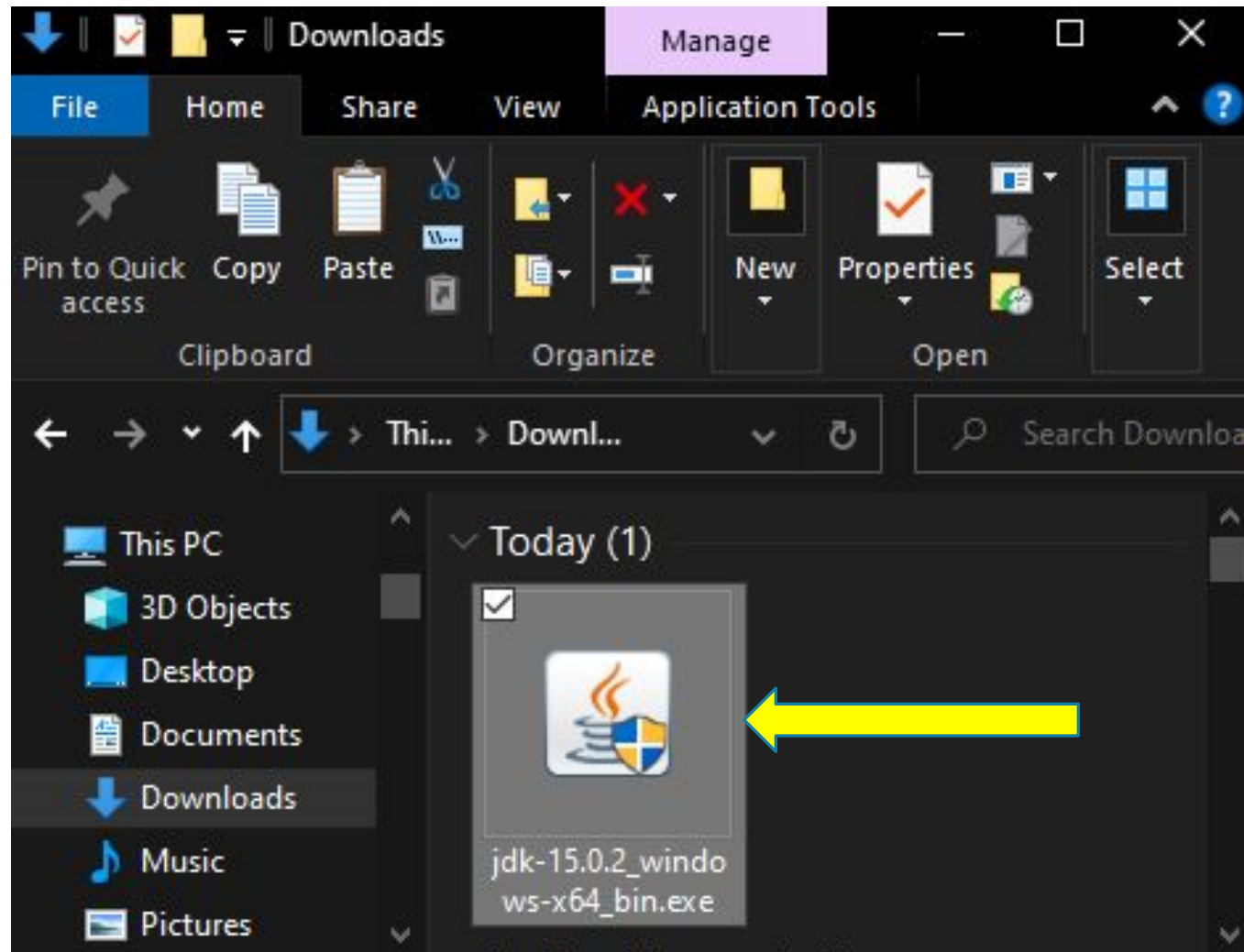
# **INSTALLING JAVA TO WINDOWS OPERATING SYSTEM**



**Once you have successfully downloaded the jdk set-up its time to set it up.**

**Lets begin**

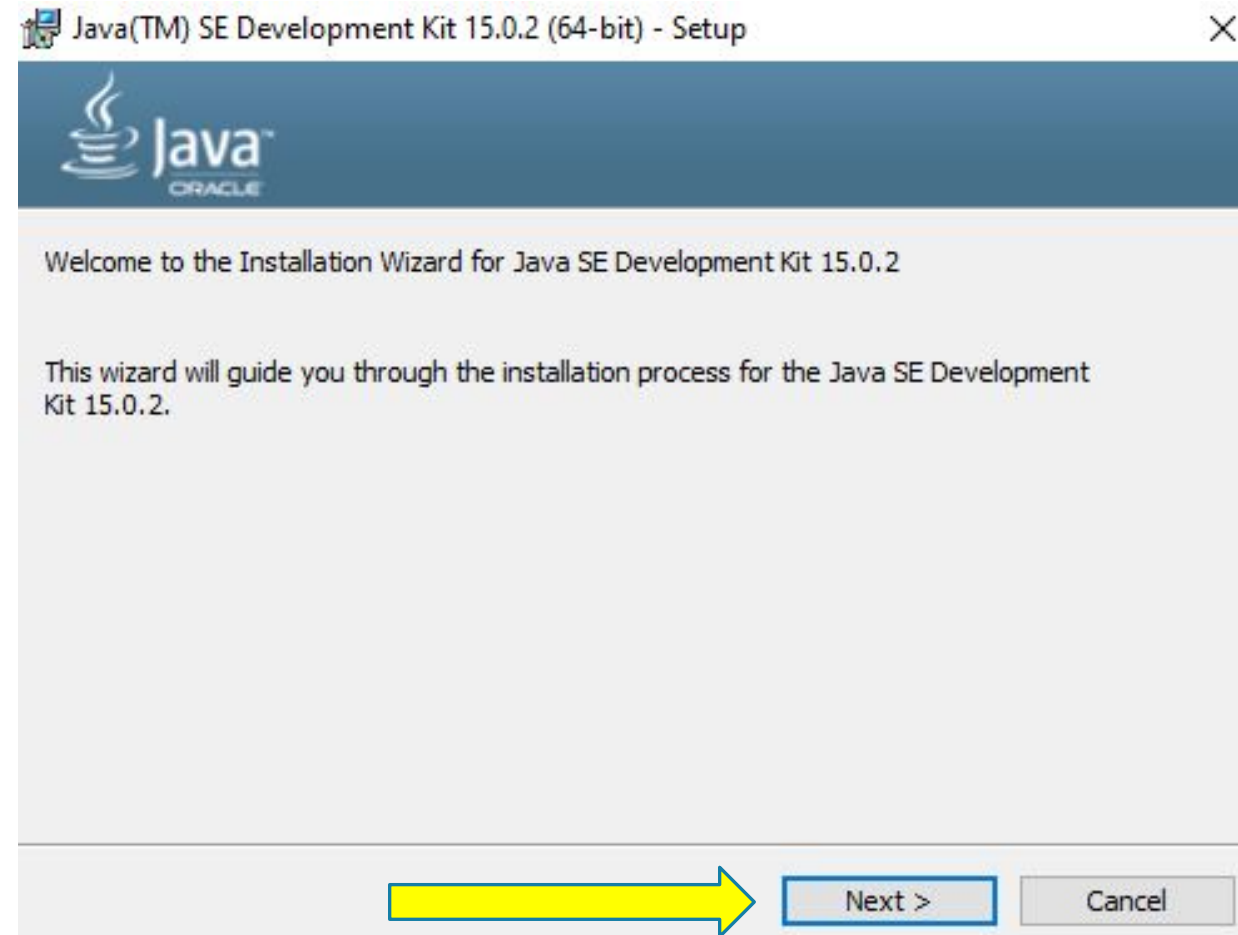
## Step 1: Locate the downloaded java installation file



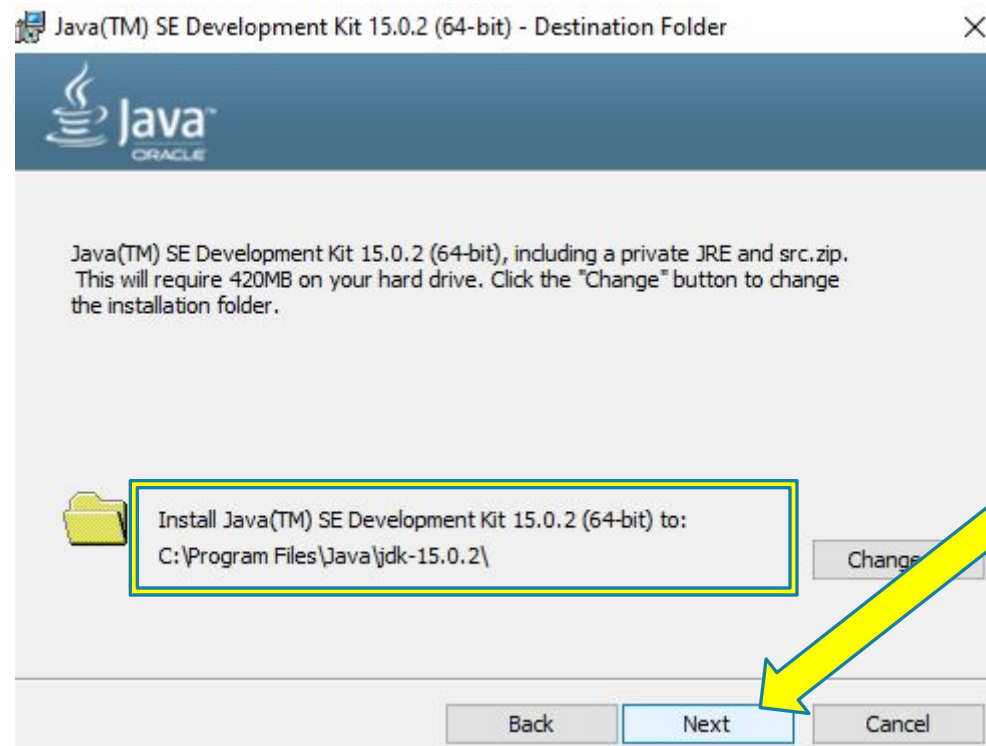


**Step 2:** Double click to open and click yes to allow the app make changes.

**Step 3:** On the Installation wizard window that appears click on next

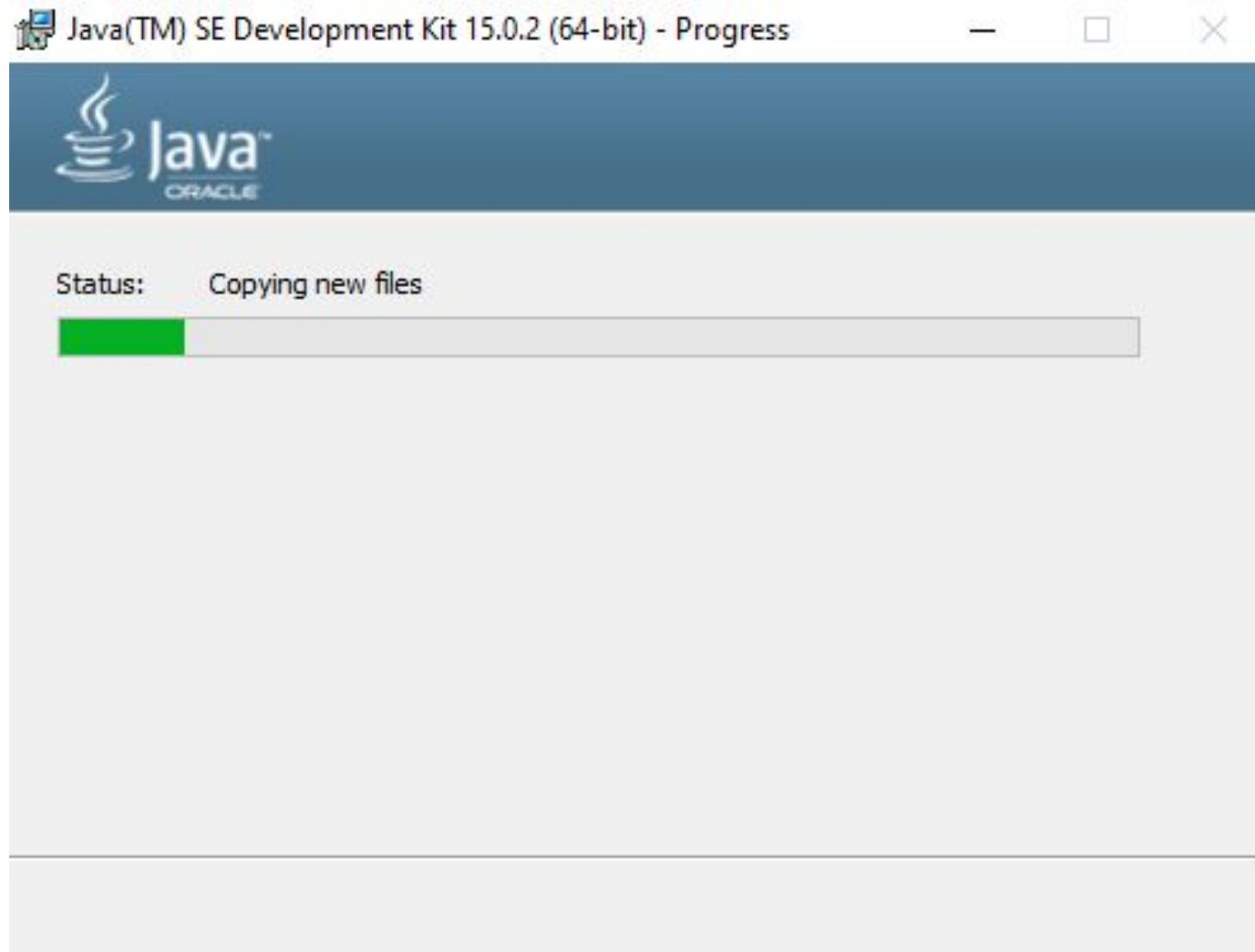


**Step 4:** Ensure the file being installed is in C:\Program Files\Java\jdk-15.0.2 then click on next





## Step 5: Wait for the installation to complete



**Step 6:** Once its done click on Close



**CONGRATULATIONS ON SUCCESSFULLY INSTALLING JAVA**



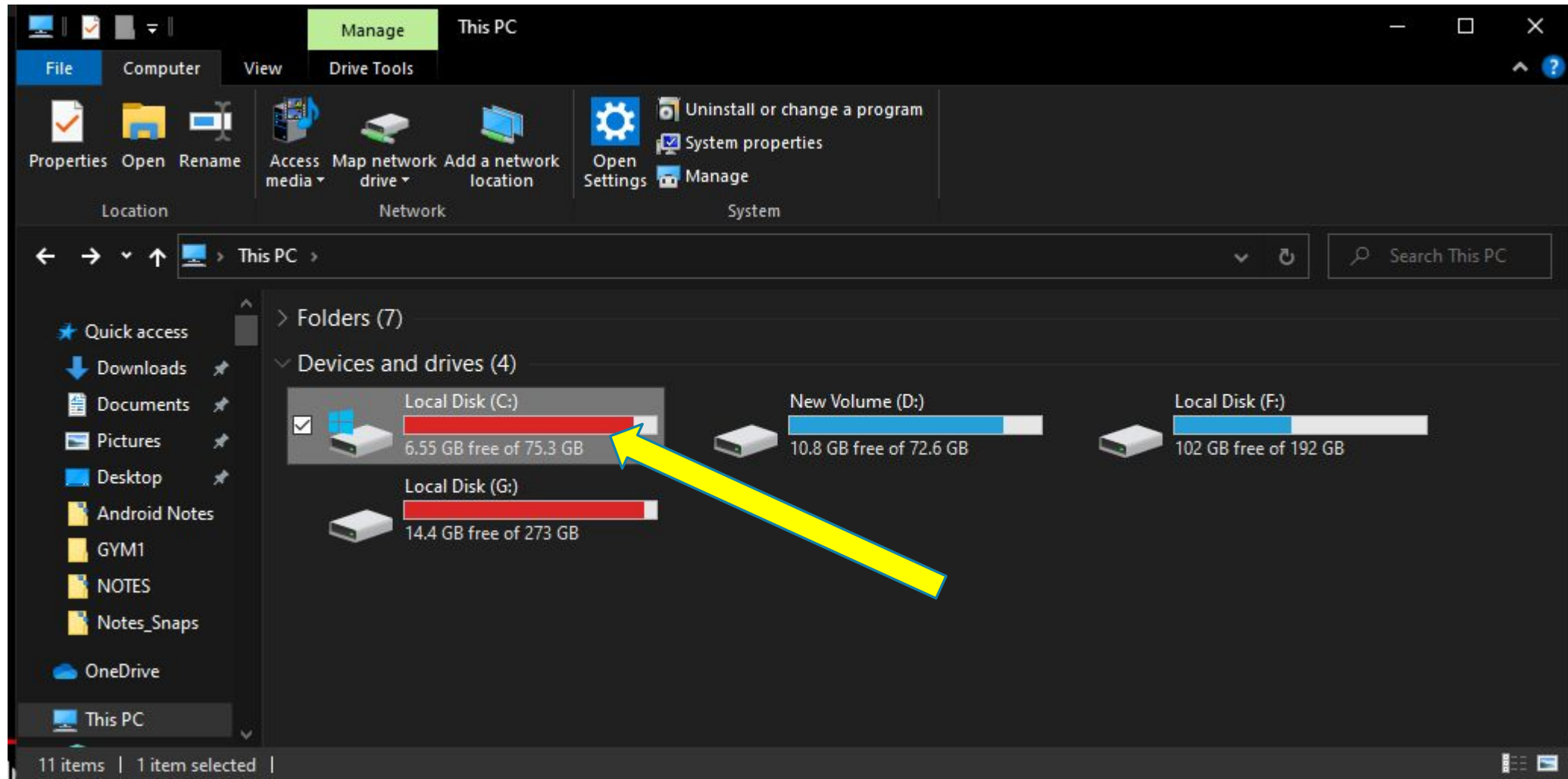


**But we are not done yet.**

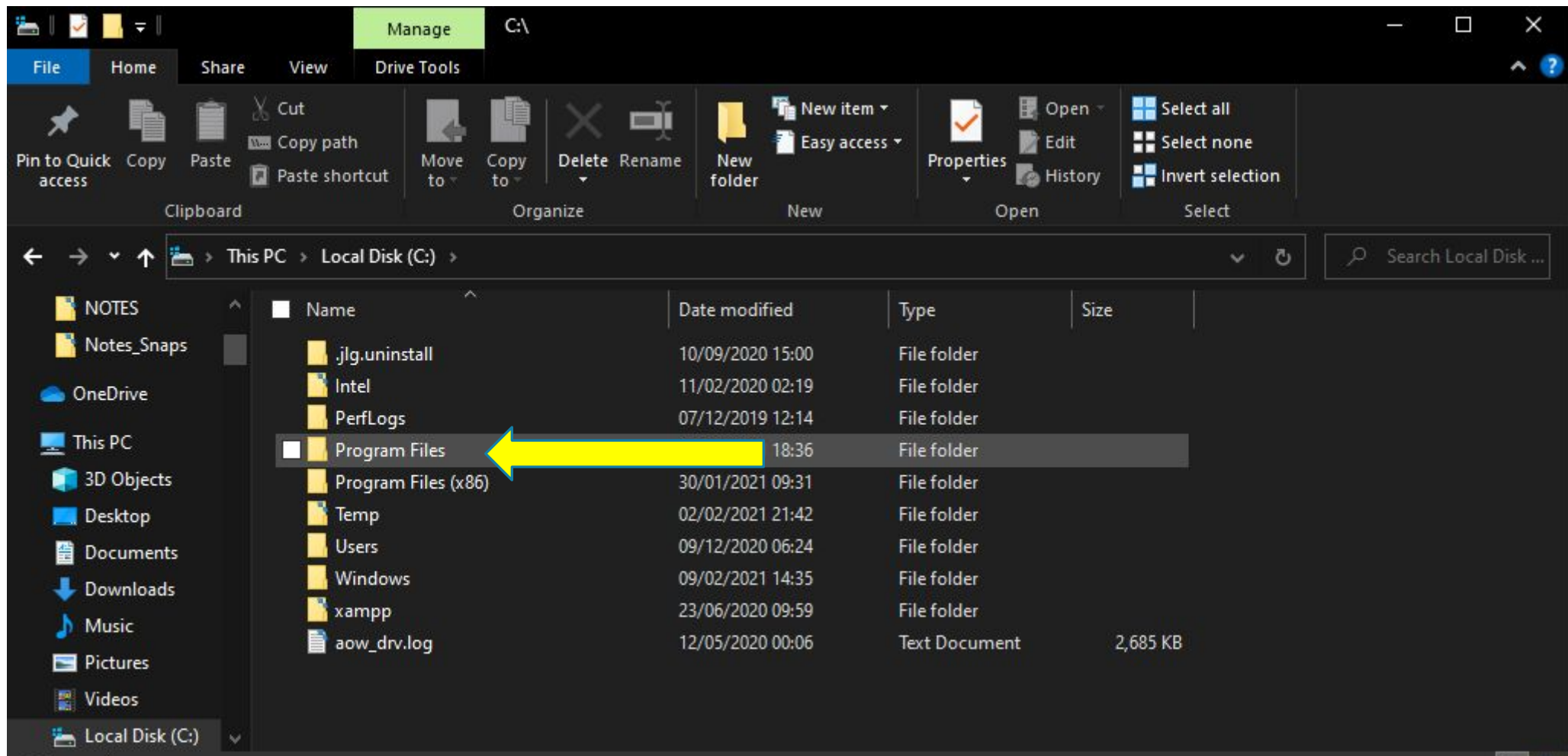
**Despite installing Java we need to set it up to the environment variables so that all our java programs can be compiled and run.**

**To do this follow the steps that follow.**

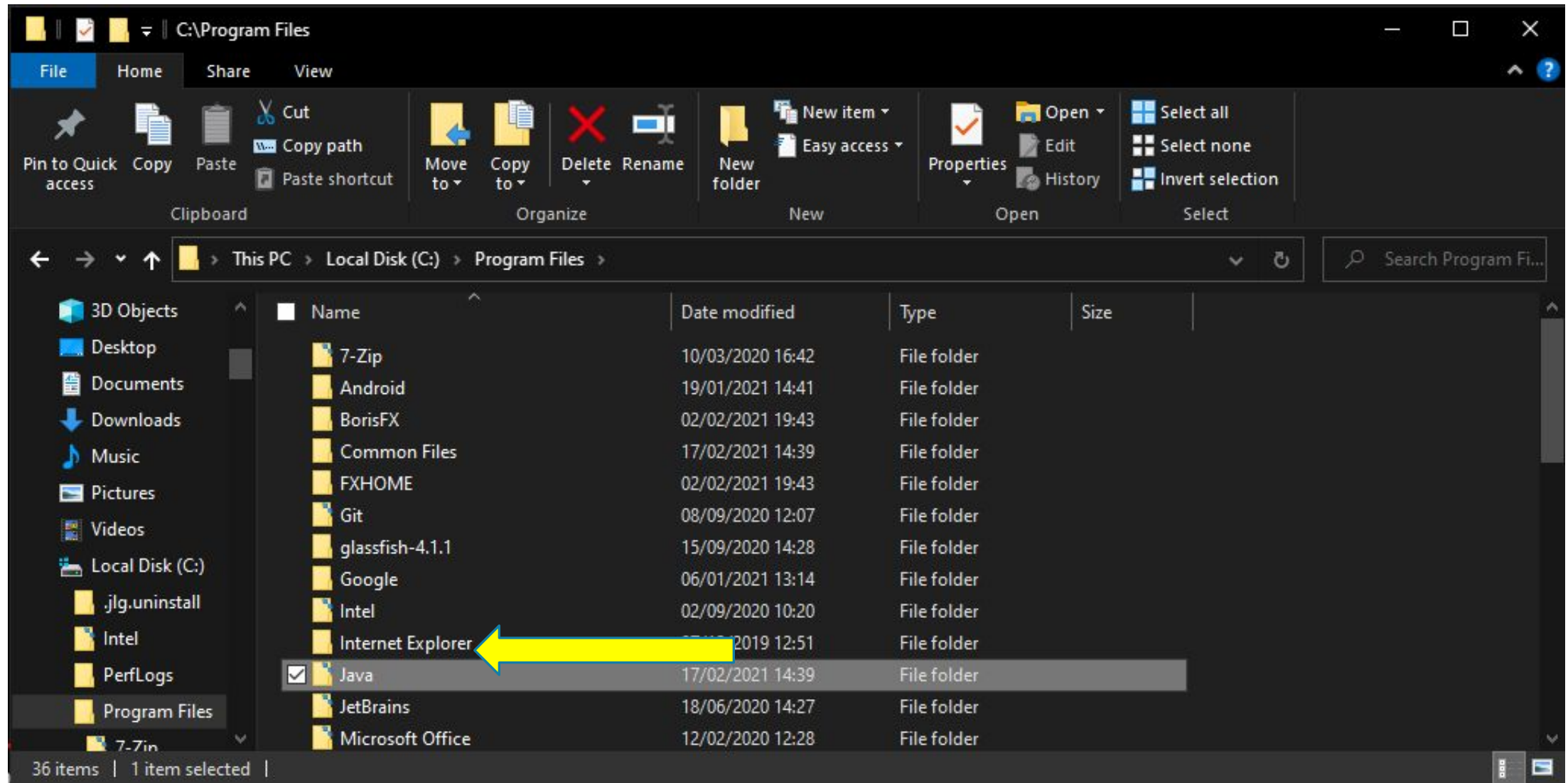
**Step 1: Go to the C drive in your PC. Right click and select open.**



**Step 2:** On opening the C Drive, locate program Files and open it.

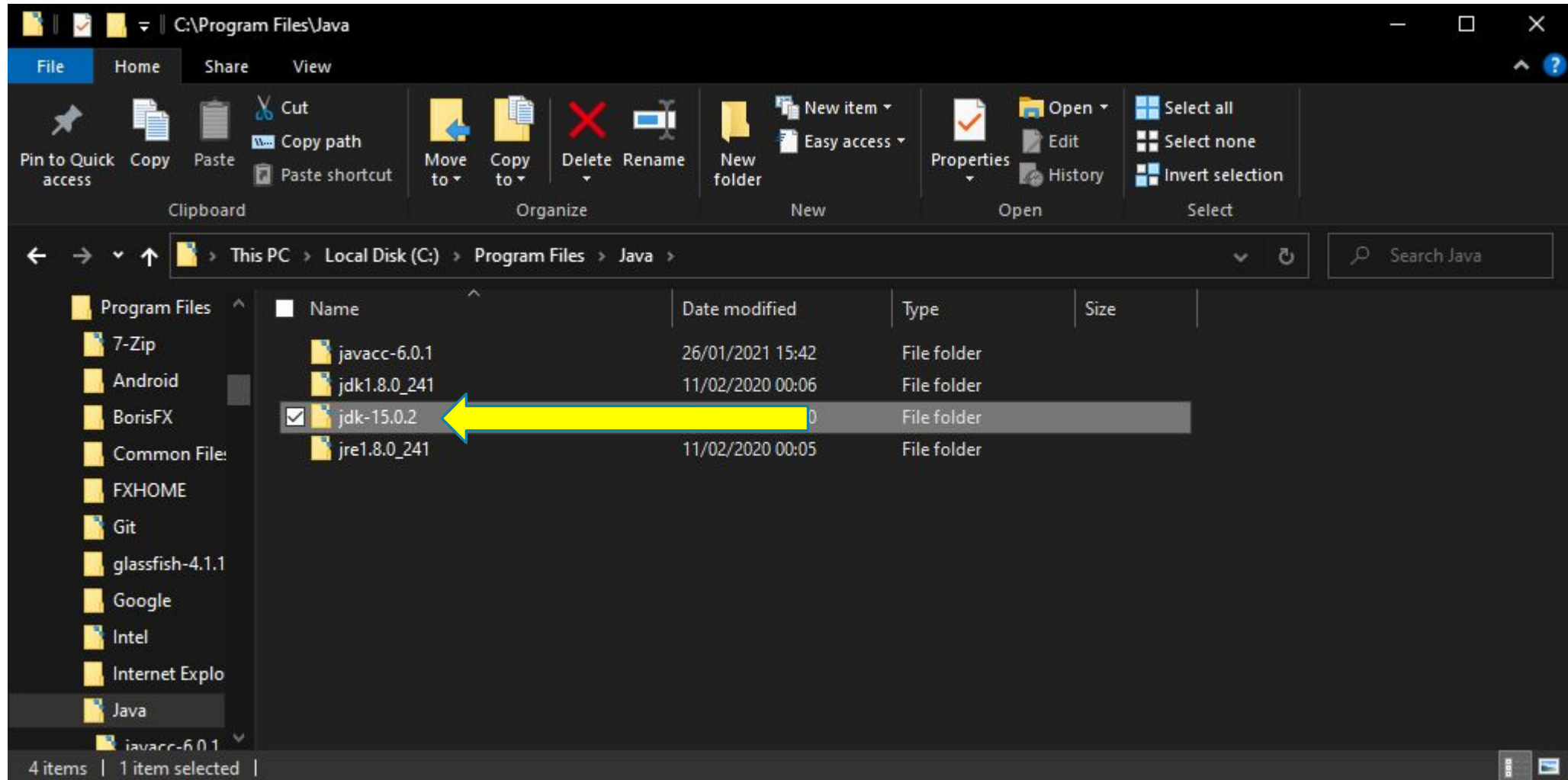


**Step 3:** On opening the Program files you'll get to see the Java folder. Go ahead and open it up.



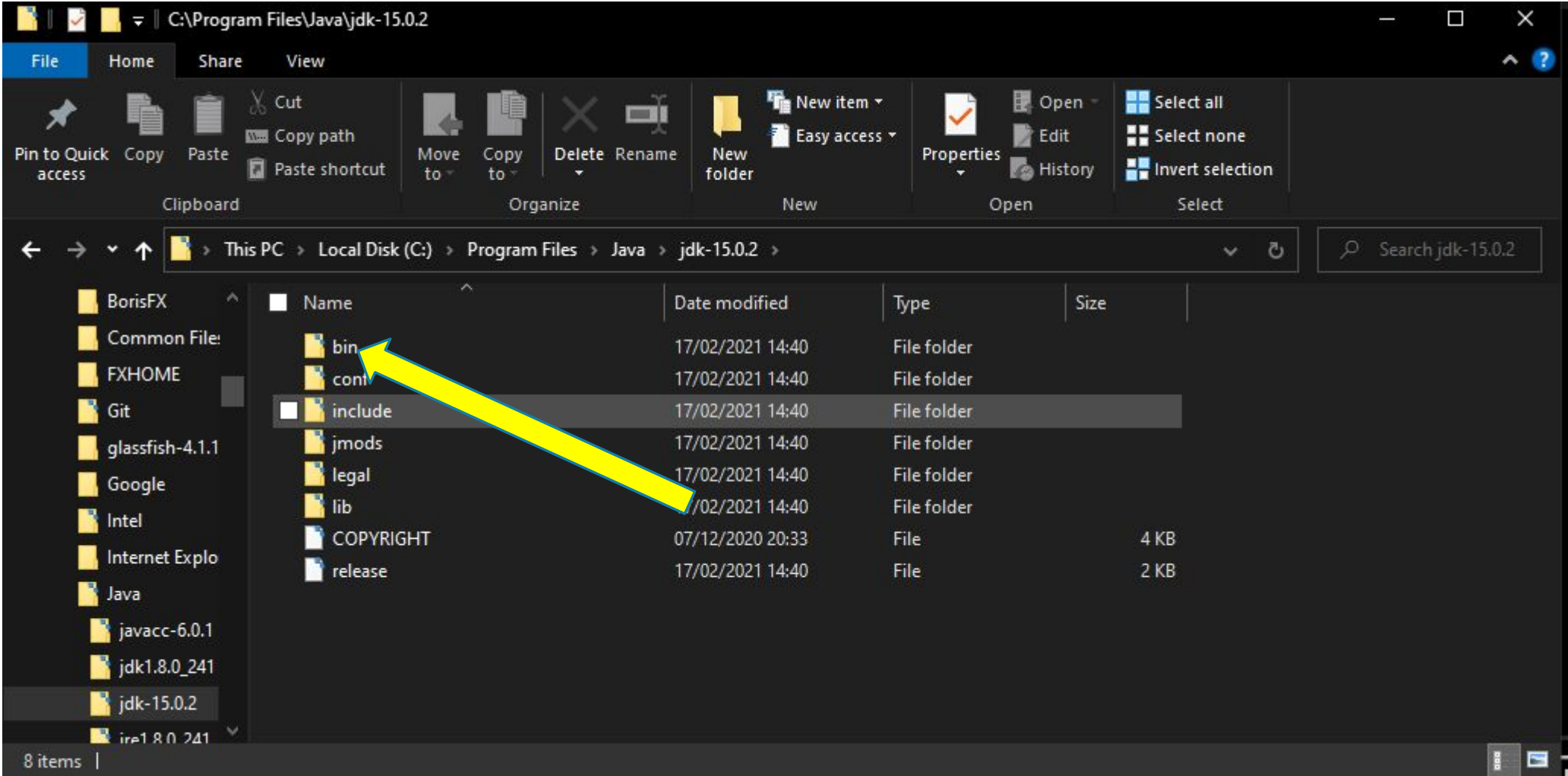


#### Step 4: Locate the jdk 15.0.2 folder and open it up

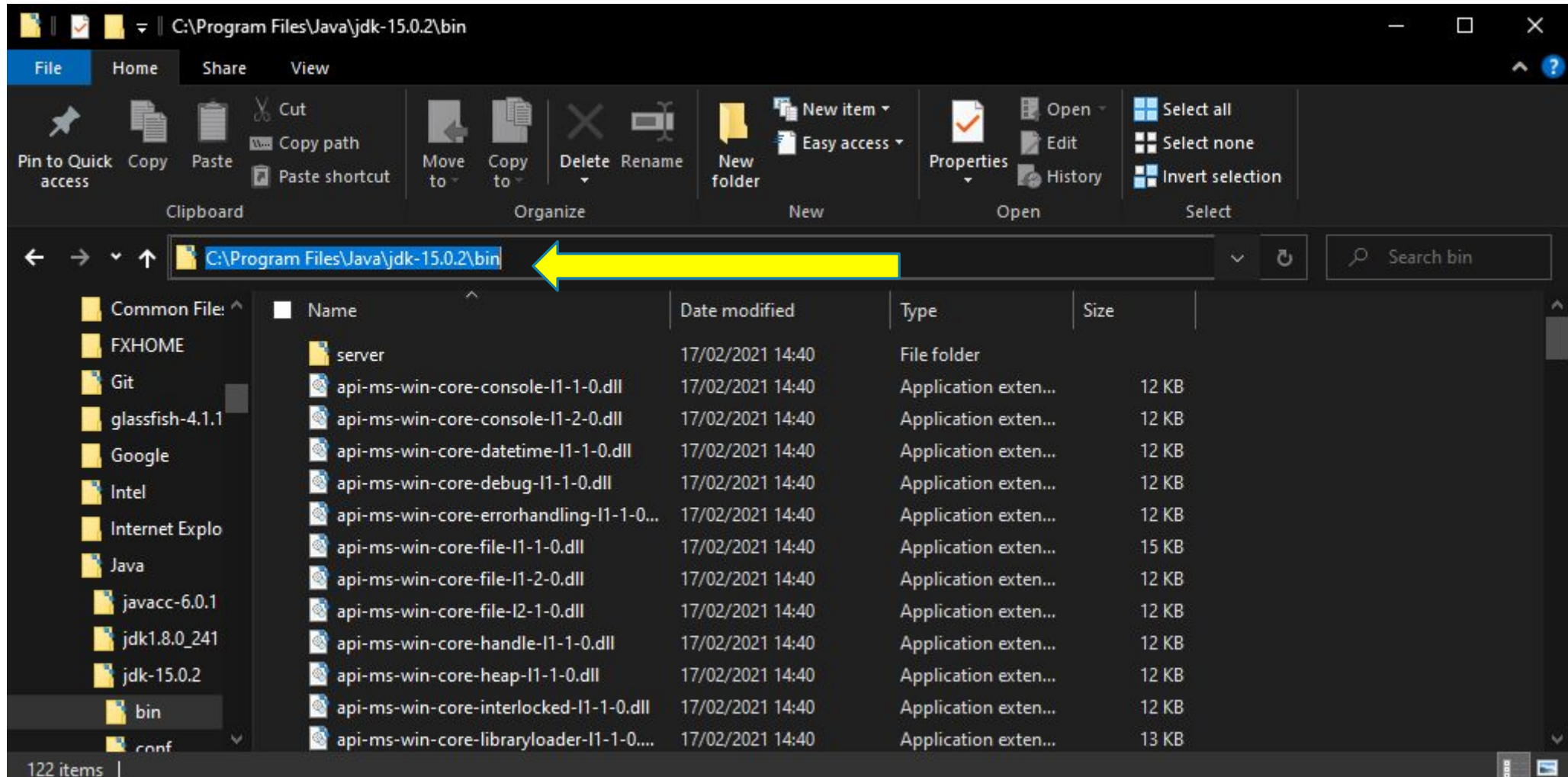




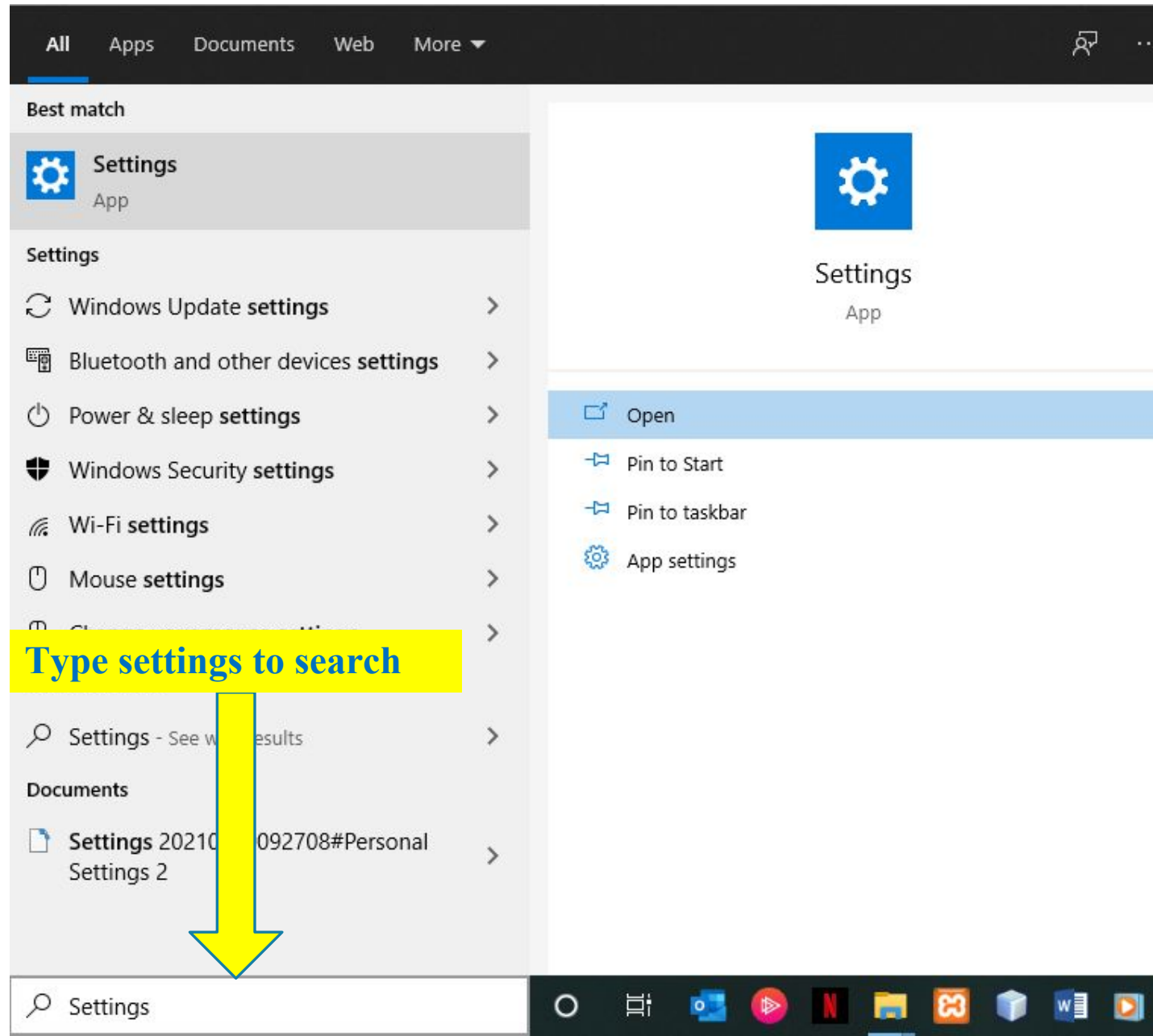
Step 5: Inside the jdk 15 folder get to locate the bin folder and open it up



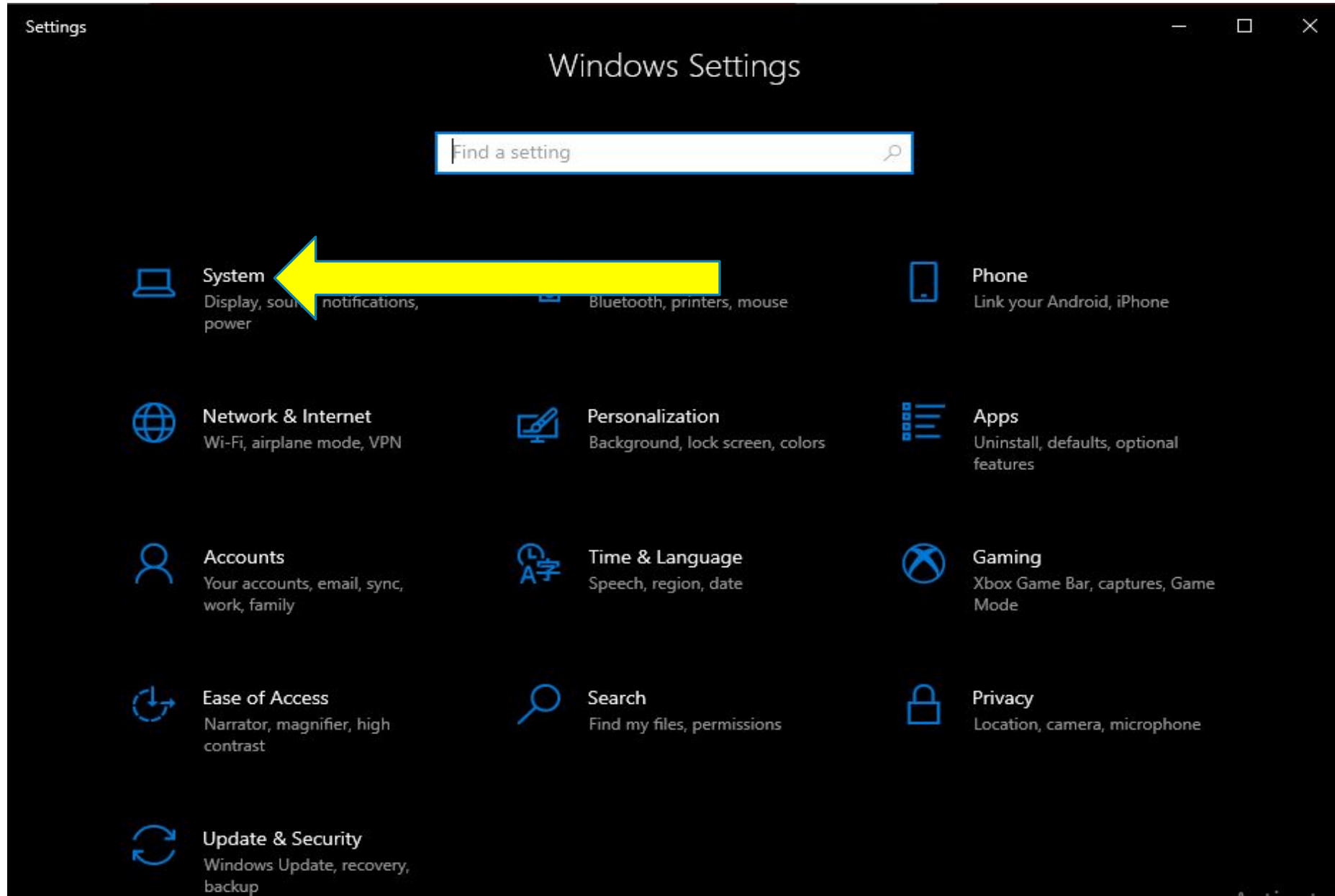
**Step 6:** Once you open the bin folder, go to the files path select it as indicated below right click and copy it.



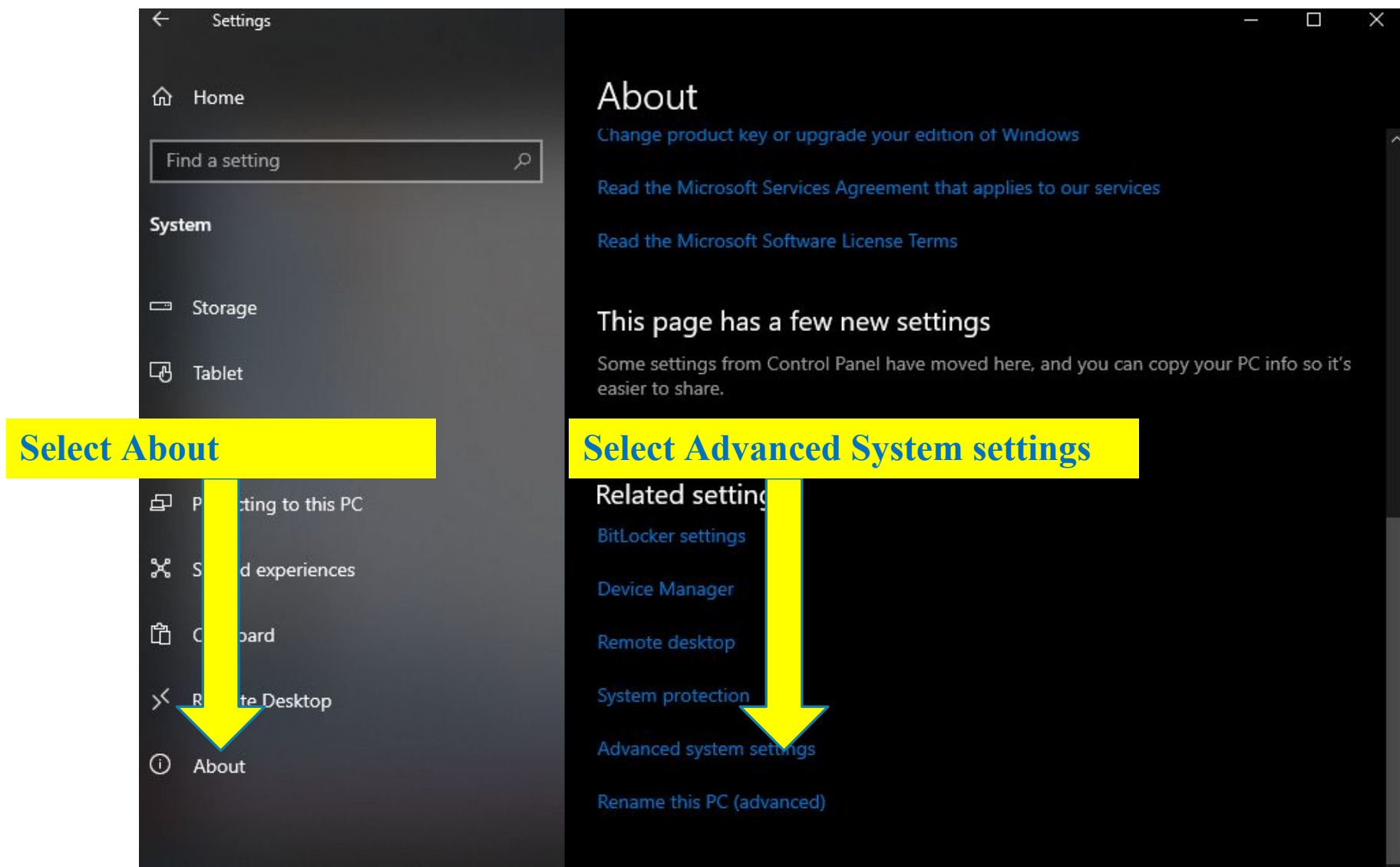
## **STEP 7 : GO TO THE SEARCH PANEL AND SEARCH FOR THE CONTROL PANEL**



## **STEP 8** : Once you've opened the settings window, locate the System and open it

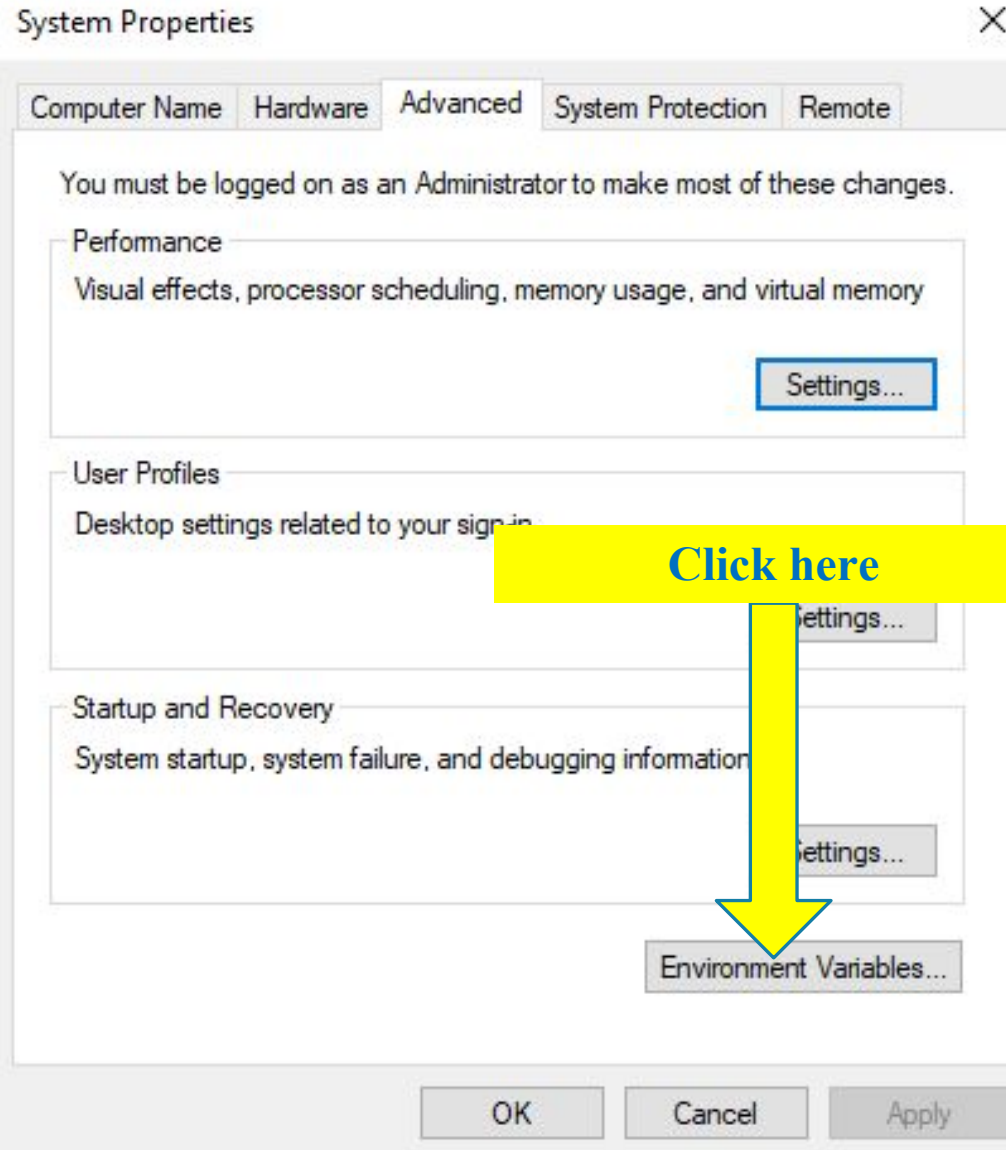


**Step 9:** Inside the System settings, on the right panel select about  
> On the left panel scroll down and select Advanced System Settings

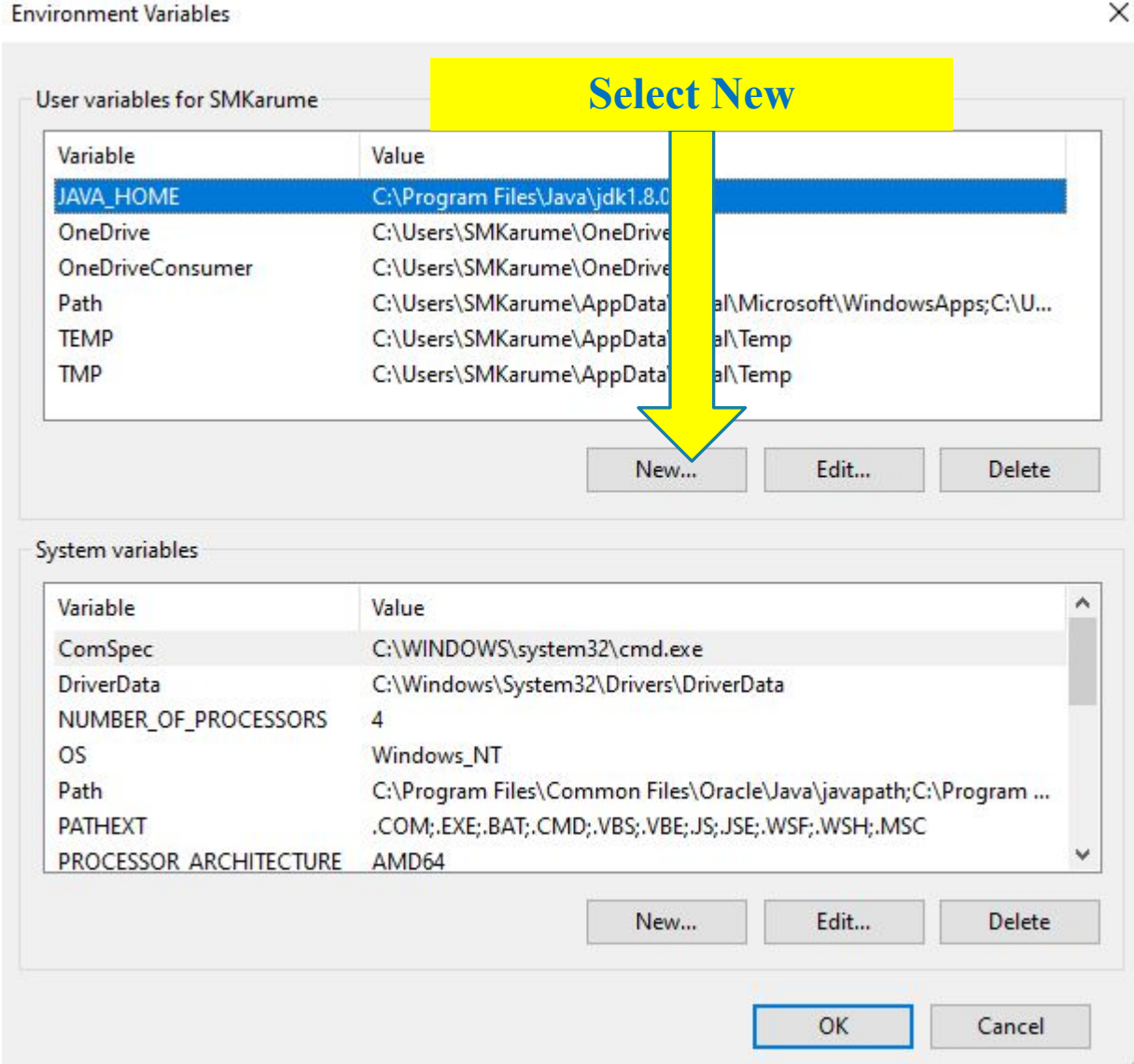




**Step 10:** On the window that appears, **Locate Environment Variables** and click on it



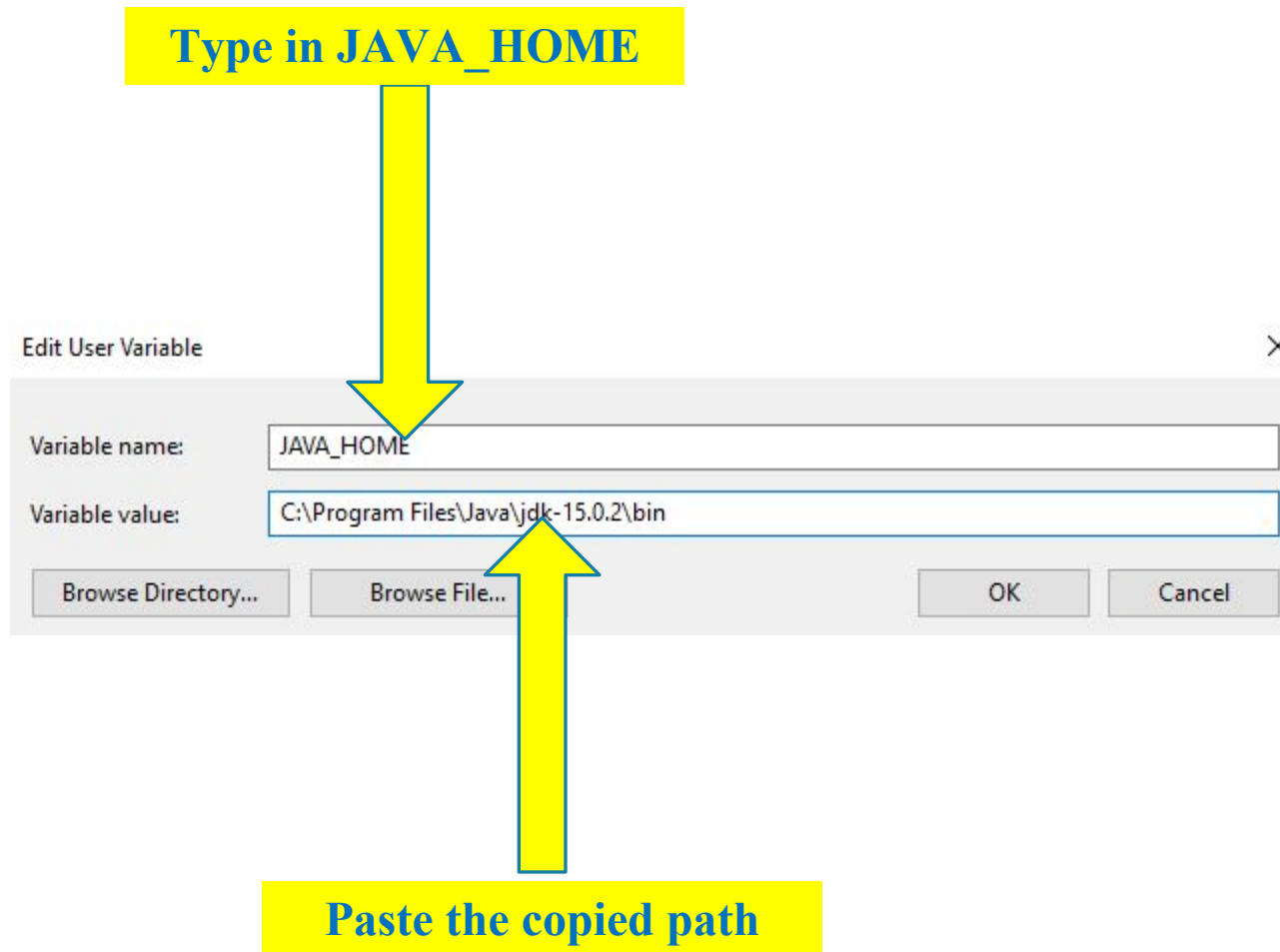
**Step 11:** Go to the user variable panel and click on new



**Step 12:** >Under the Variable name field, get to type in JAVA\_HOME

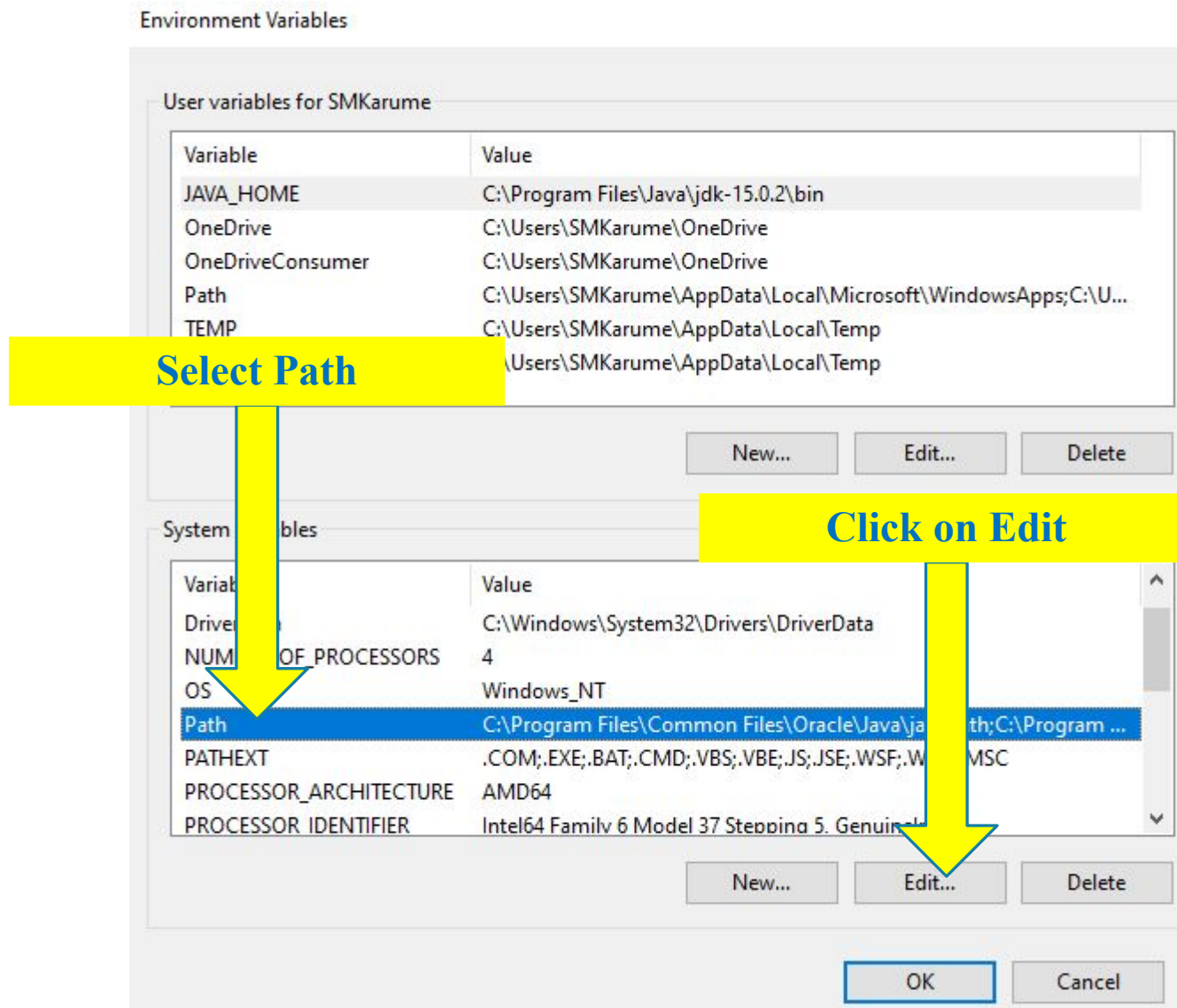
>Under Variable value field get to paste the path that we earlier in the bin folder and click on OK.

copied



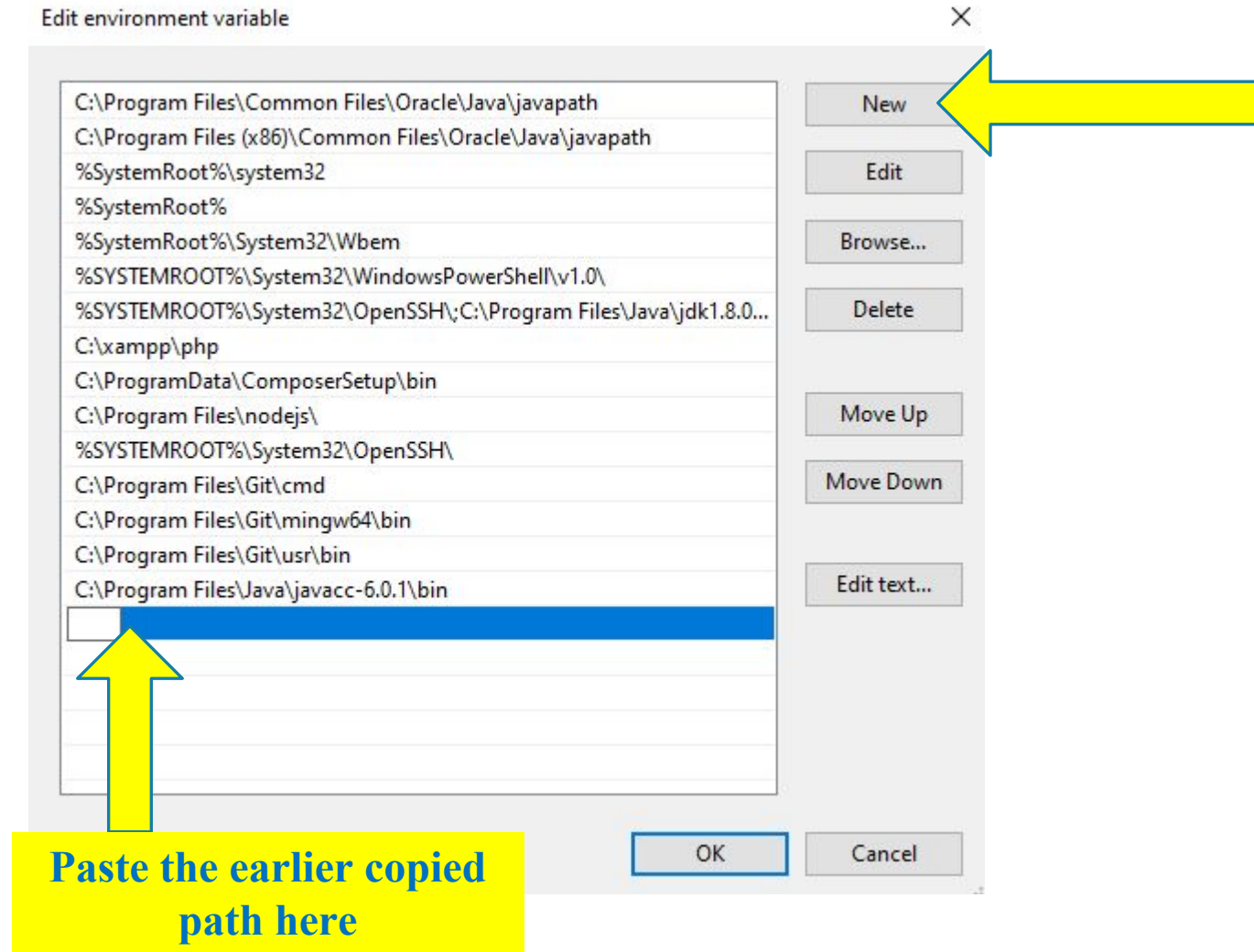


**Step 13:** Once you've set the user variables, go ahead to the System variables panel and select path then click on Edit button below it



## **Step 14: On the Environment Variable window click on new button**

**: A new filed will appear. On it paste the same path copied in the bin folder and press okay.**



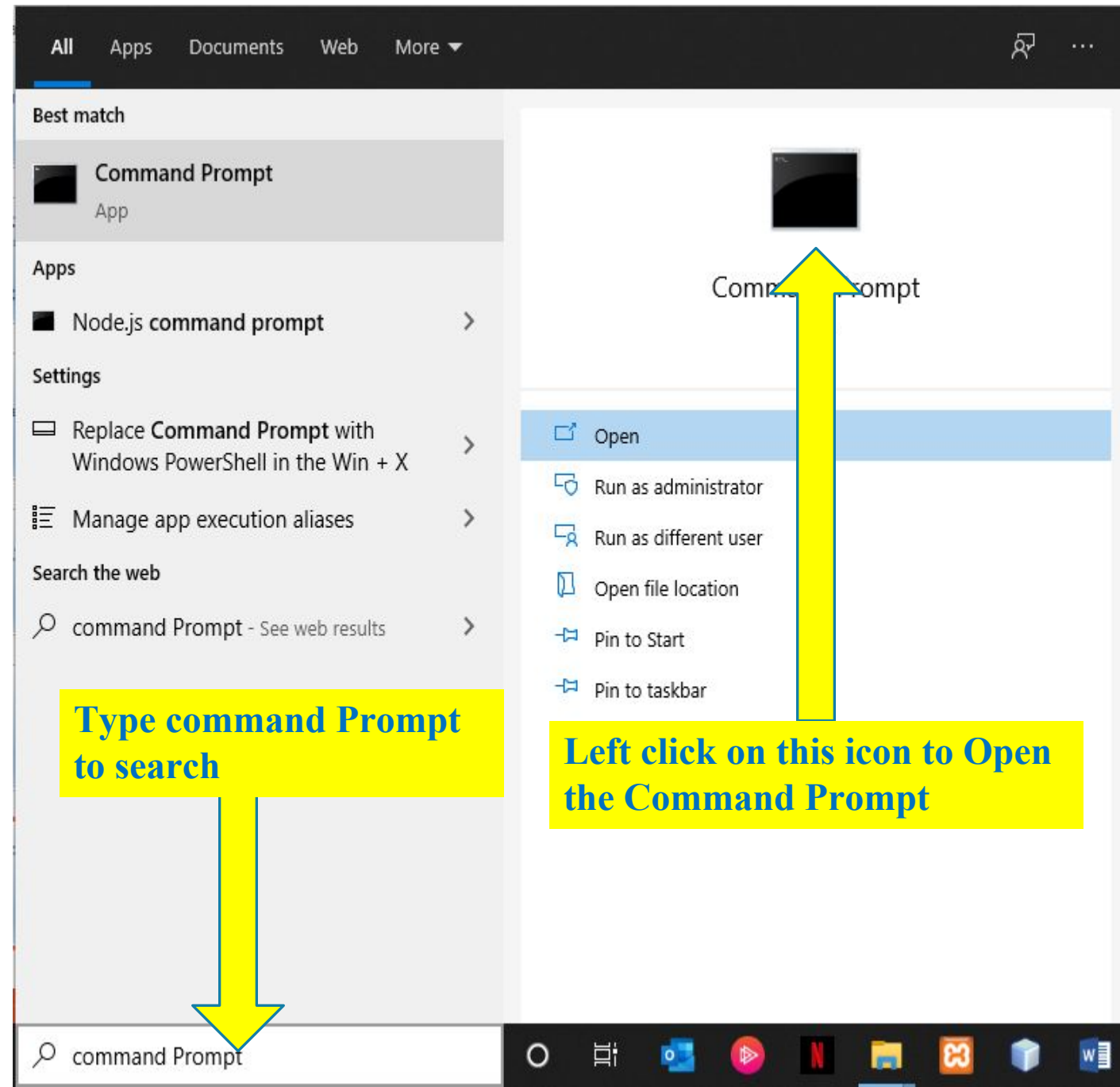


**Once you've completed the above steps, click on the okay buttons on the open environment variables windows then go ahead and check whether java has been installed successfully.**



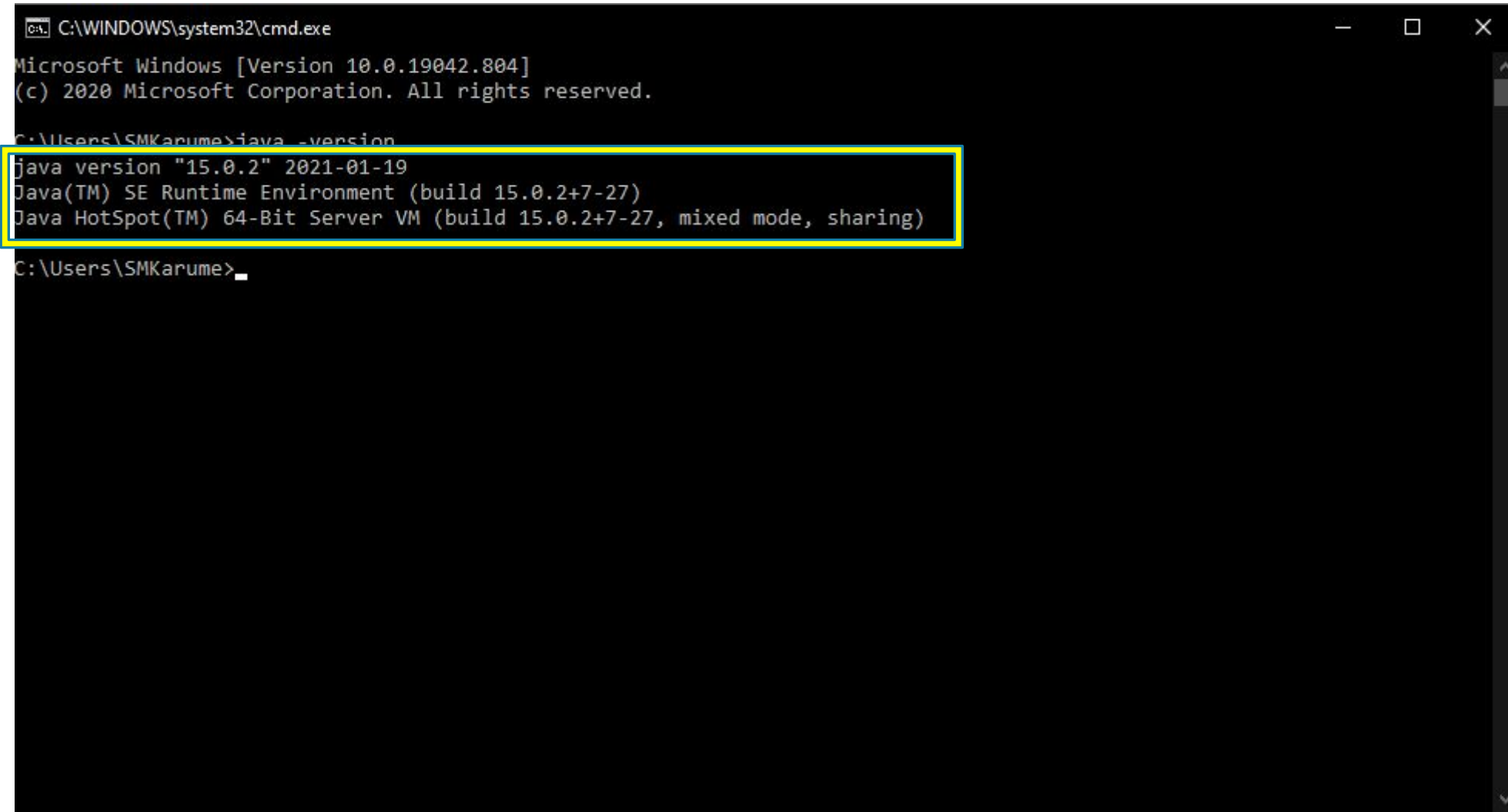
**To do so follow the steps shown.**

1. Go to the bottom left of your screen and click on the search tab.
2. Type in command prompt and you should be able to see such a screen shown alongside
3. Open the command prompt by either pressing enter on your keyboard or by left clicking in the icon.



On opening the command prompt first type in java -version and press enter

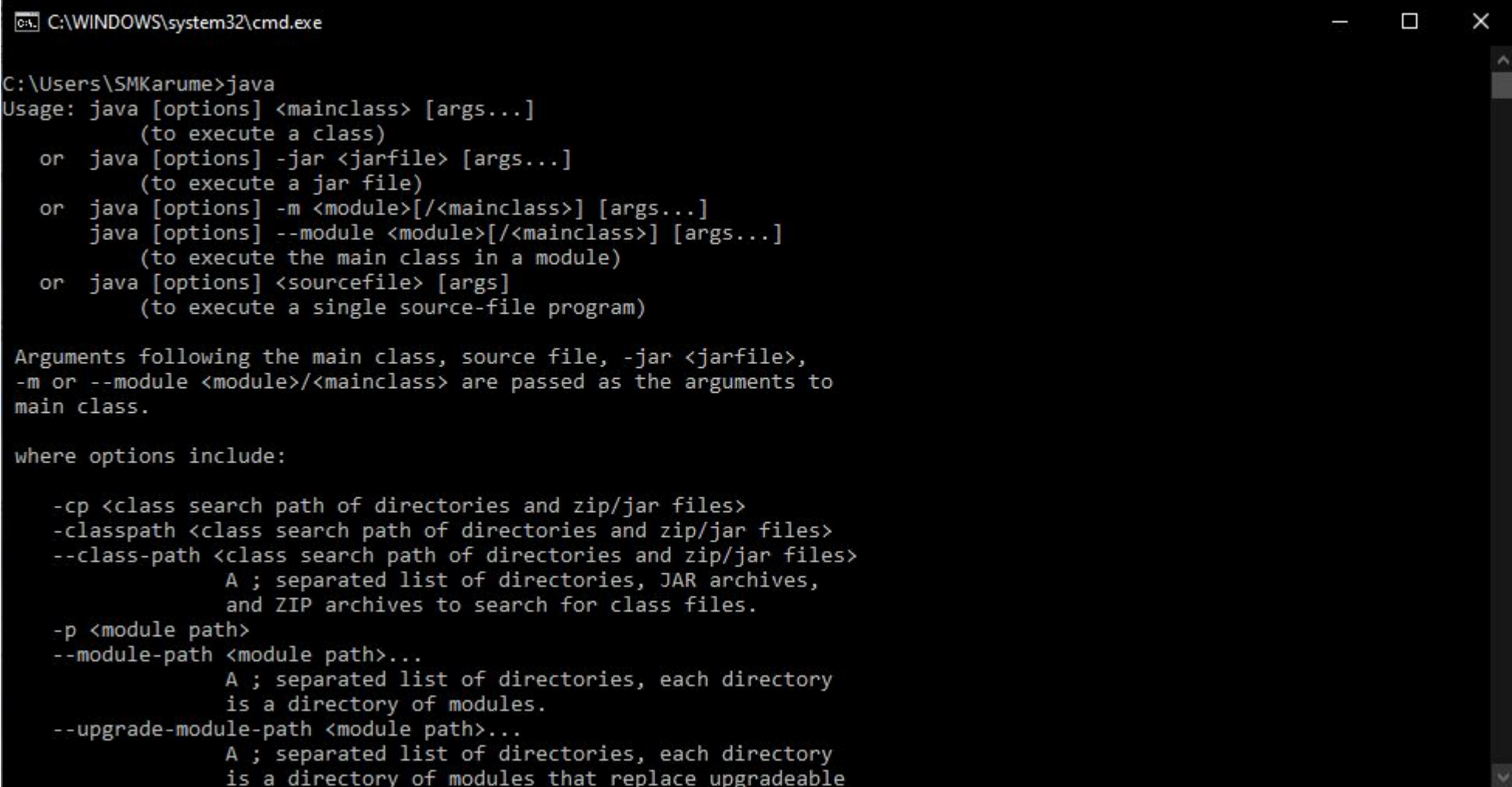
If all is well you will see you java version as shown below

A screenshot of a Windows Command Prompt window. The title bar at the top reads 'C:\WINDOWS\system32\cmd.exe'. The window contains the following text: 'Microsoft Windows [Version 10.0.19042.804]', '(c) 2020 Microsoft Corporation. All rights reserved.', 'C:\Users\SMKarume>java -version', and the output: 'java version "15.0.2" 2021-01-19', 'Java(TM) SE Runtime Environment (build 15.0.2+7-27)', and 'Java HotSpot(TM) 64-Bit Server VM (build 15.0.2+7-27, mixed mode, sharing)'. The output lines are highlighted with a yellow rectangular box. The prompt 'C:\Users\SMKarume>' is visible at the bottom of the highlighted area.

```
C:\WINDOWS\system32\cmd.exe
Microsoft Windows [Version 10.0.19042.804]
(c) 2020 Microsoft Corporation. All rights reserved.
C:\Users\SMKarume>java -version
java version "15.0.2" 2021-01-19
Java(TM) SE Runtime Environment (build 15.0.2+7-27)
Java HotSpot(TM) 64-Bit Server VM (build 15.0.2+7-27, mixed mode, sharing)
C:\Users\SMKarume>
```

**Press Enter once more then Get to type the command java**

**The following information shown below should appear.**



```
C:\WINDOWS\system32\cmd.exe

C:\Users\SMKarume>java
Usage: java [options] <mainclass> [args...]
        (to execute a class)
  or  java [options] -jar <jarfile> [args...]
        (to execute a jar file)
  or  java [options] -m <module>[/<mainclass>] [args...]
        java [options] --module <module>[/<mainclass>] [args...]
        (to execute the main class in a module)
  or  java [options] <sourcefile> [args]
        (to execute a single source-file program)

Arguments following the main class, source file, -jar <jarfile>,
-m or --module <module>/<mainclass> are passed as the arguments to
main class.

where options include:

  -cp <class search path of directories and zip/jar files>
  -classpath <class search path of directories and zip/jar files>
  --class-path <class search path of directories and zip/jar files>
                A ; separated list of directories, JAR archives,
                and ZIP archives to search for class files.
  -p <module path>
  --module-path <module path>...
                A ; separated list of directories, each directory
                is a directory of modules.
  --upgrade-module-path <module path>...
                A ; separated list of directories, each directory
                is a directory of modules that replace upgradeable
```

**CONGRATULATIONS ON SUCCESSFULLY SETTING UP JAVA**

