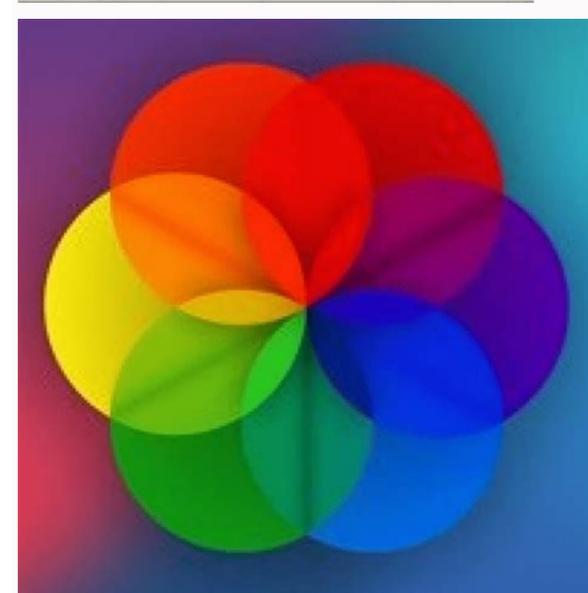


Continue

```
9 JTextField t1;
10 public void display()
11 {
12     JFrame f = new JFrame("Kamleshubhai Tutorial");
13     JPanel p = new JPanel();
14     JLabel l = new JLabel("");
15     t1 = new JTextField(20);
16     f.getContentPane().add(p);
17     p.add(t1);
18     p.add(l);
19 }
20 f.setSize(500,300);
21 f.setVisible(true);
22 }
23
24 MyKeyListener mca = new MyKeyListener();
25
26
27 }
28
29 class MyKeyListener implements KeyListener
30 {
31     public void keyPressed(KeyEvent e)
32     {
33         char ch = e.getKeyChar();
34         l.setText(ch);
35     }
36 }
```



```
private void executeLoad(long timeout, int usersCount) {
    showDebugInfo(timeout);
    load.setPages(URL, parsingTimeout);
    load.setTimeout(timeout);
    List<Load> threads = new ArrayList<>();
    for (int i = 0; i < usersCount; i++) {
        threads.add(new Load(this, URL));
    }
    logger.info(" " + usersCount + " threads are created");
    for (Load thread : threads) {
        thread.start();
    }
    logger.info(" All threads are started");
    progressInfo(timeout);
    system.out.println(".....DONE\nProcessing with data");
}
private void executeLoad() {
}
```



Java 8 openjdk windows. Install java 8 openjdk windows. Java 8 openjdk windows 10. Java openjdk 8 download windows 10. Openjdk 8 java\_home windows. Openjdk 8 javafx windows. Java jdk 8 openjdk windows. Openjdk java 8 windows 64.

AdoptOpenJDK is a new website hosted by the java community. You can find .msi installers for OpenJDK 8 through 16 there, which will perform all the things listed in the question (Unpacking, registry keys, PATH variable updating (and JAVA\_HOME), uninstaller...). As of writing, AdoptOpenJDK still hosts the latest versions of OpenJDK, but in the future, it is planned for new releases to be available at Eclipse Adoptium. This document instructs you on how to set up a Java programming environment for creating and compiling a Java program in IntelliJ and executing it from the command line. You will need a 64-bit version of Windows 8 or 10. 0. Install the Java Programming Environment The installer installs and configures a Java programming environment, including OpenJDK 11 and IntelliJ IDEA Community Edition 2022.1. Log in to the user account in which you will be programming. Your account must have Administrator privileges. Download the Windows installer lift-java-installer.exe. Double-click lift-java-installer.exe to install the software. Enter your Windows password when prompted. Use all of the default options. Delete lift-java-installer.exe. 1. Open a Project in IntelliJ You will develop your Java programs in an application called IntelliJ IDEA Community Edition. IntelliJ organizes Java programs into projects. In our context, each project corresponds to one programming assignment. A typical project contains Java programs, associated data files, and course-specific settings (such as compiler options, style rules, and textbook libraries). Download the project for your programming assignment to a convenient location (such as the Desktop). [ sample project for COS 126 (Princeton) ] [ sample project for COS 226 (Princeton) ] [ sample project for Computer Science: Programming with a Purpose (Coursera) ] [ sample project for Algorithms, Part I or II (Coursera) ] To unzip the zip file, right click it and select Extract All. This creates a project folder with the name of the corresponding programming assignment (such as hello). Delete the zip file. To launch IntelliJ, click the Start button and type "IntelliJ IDEA Community Edition 2022.1.2a6". When you launch IntelliJ for the first time, IntelliJ may display the JetBrains privacy policy. Scroll down and Accept. IntelliJ may ask if you want to send anonymous usage statistics to JetBrains. Choose your preferred option. IntelliJ will display the Welcome to IntelliJ IDEA screen. To open a project from the Welcome to IntelliJ IDEA screen, click Open and select the project folder. You should see an assignment logo (in the main editor window) and a list of project files (in the Project View sidebar at left). When you launch IntelliJ for the first time, it may take a minute or two to index your files; some features (such as auto importing) will be unavailable until this process completes. When you are finished working, select the menu option File -> Exit to exit IntelliJ. The next time you launch IntelliJ, your recent projects will appear in the Welcome to IntelliJ IDEA screen for easy access. 2. Create a Program in IntelliJ Now you are ready to write your first Java program. IntelliJ features many specialized programming tools including line numbering, syntax highlighting, bracket matching, auto indenting, auto formatting, variable renaming, and continuous code inspection. To create a new Java program: R-click on IntelliJ and the project (if you closed it in the previous step). Click the project name in the Project View sidebar (at left), so that it becomes highlighted. If you don't see the Project View sidebar, select LIFT -> Project (Ctrl + 1) to toggle it on. Select the menu option LIFT -> New Java Class. When prompted, type HelloWorld for the Name, followed by Return. In the main editor window, complete the Java program HelloWorld.java exactly as it appears below. (IntelliJ generates the gray boilerplate code automatically, possibly with the addition of a course header block comment.) public class HelloWorld { public static void main(String[] args) { System.out.println("Hello, World"); } } If you omit even a semicolon, the program won't compile. As you type, IntelliJ highlights different syntactic elements in different colors. When you type a left bracket, IntelliJ adds the matching right bracket. When you begin a new line, IntelliJ indents it. To save the file, select the menu option File -> Save All (Ctrl + S). When you save the file, IntelliJ reformats your code (as necessary). 3. Compile and Execute the Program (from IntelliJ) Now, it is time to execute (or run) your program. This is the exciting part, where your computer follows the instructions specified by your program. Before doing so, you must compile your program into a form more amenable for execution on a computer. Select the program that you wish to compile and execute in the Project View sidebar. The program should now appear in the main editor window. To compile your program, select the menu option LIFT -> Recompile 'HelloWorld.java' (Ctrl + B). If the compilation succeeds, you will receive confirmation in the status bar (at bottom). If the compilation fails, a Recompile panel will open up (at bottom), highlighting the compile-time errors or warnings. Check your program carefully for typos, using the error messages as a guide. To execute your program, select the menu option LIFT -> Run 'HelloWorld' with Arguments (Ctrl + E). Since this program takes no command-line arguments, click OK. You should see the output of the program (in white), along with a message that the program finished normally (with exit code 0). 4. Compile and Execute the Program (from the command line) The command line is a simple and powerful mechanism for controlling your programs (e.g., command-line arguments, file redirection, and piping). IntelliJ supplies an embedded terminal for easy access to the command line. Select the menu option View -> Tool Windows -> Terminal (Alt + 2). This will launch a Git Bash terminal where you type commands. You will see a command prompt that looks something like this: ~ -> The ~/Desktop/hello is the current working directory, where ~ is shorthand for your home directory. To compile your program, type the following javac command. More specifically, type the text in yellow that appears on the same line as the command prompt. -> javac HelloWorld.java -> Assuming that the file HelloWorld.java is in the current working directory, you should not see any compile-time errors or warnings. To execute your program, type the following java command: -> java HelloWorld Hello, World You should see the output of your program beneath the line on which you typed the command. 5. Textbook Libraries (from the command line) To make our textbook libraries accessible to Java from the command line, you will use our wrapper scripts. Computer Science: An Interdisciplinary Approach (including COS 126 students). The program Barnsley.java uses our standard drawing and standard random libraries in stdlib.jar to draw a Barnsley fern. First download Barnsley.java. Then, use Windows Explorer to move it to a project folder (such as hello). Finally, to compile and execute it, type the following commands in the terminal: -> ls Barnsley.java COS 126.jar HelloWorld.java logo.png -> java-introcs Barnsley.java -> java-introcs Barnsley 10000 When you execute the program, a standard drawing window will appear and an image like this one will be generated, one point at a time: To get your command prompt back, close the standard drawing window. Algorithms, 4th Edition (including COS 226 students). The program CollidingDisks.java uses various libraries in algs4.jar to simulate the motion of a disks subject to the laws of elastic collision. First download CollidingDisks.java. Then, use Windows Explorer to move it to a project folder (such as percolation). Finally, to compile and execute it, type the following commands in the terminal: -> ls CollidingDisks.java COS 226.jar WELCOME.txt logo.png -> javac-algs4 CollidingDisks.java -> java-algs4 CollidingDisks 20 When you execute the program, a standard drawing window will appear with an animation of 20 colliding disks. To get your command prompt back, close the standard drawing window. Frequently Asked Questions Expand All Collapse All I installed IntelliJ and Java using lift-java-installer.exe last semester or year. Should I reinstall this semester? Yes. This installer includes IntelliJ and Java 11. The old installer may have used an earlier version of IntelliJ or Java. Be sure to uninstall the old version before proceeding. I wrecked some of my IntelliJ settings. Can I rerun the installer to restore the settings? Yes. However, the proper way to reinstall software on Windows is to completely uninstall it and then to reinstall it. So, first, uninstall the software; then, run lift-java-installer.exe. How can I uninstall the software? To uninstall everything, navigate to C:\Program Files\LIFT-CS and launch the uninstaller unins000.exe. To uninstall only IntelliJ, navigate to C:\Program Files\JetBrains\IntelliJ IDEA Community Edition 2022.1\bin; right click the uninstaller Uninstall.exe; and select Run as administrator. Can I run the installer using Run as administrator? No. You must run the installer from an account in which you wish to program, and that account must have Administrator privileges. If you use Run as administrator, the installer will not know the original user's identity (so it can't copy files to the original user's home directory). The installer failed. How can I investigate why? Check the installer logs at %TEMP%\LIFT-CS and %TEMP%\Setup Log YYYY-MM-DD #NNN.txt, where %TEMP% is typically C:\Users\\AppData\Local\Temp, YYYY-MM-DD is the current date, and NNN is an integer. I have Windows Vista or Windows 7. Is that too old? Yes. Yes. IntelliJ 2022.1 requires Windows 8 or 10. How long will the installer take to complete installation? Once downloaded, it should take a couple of minutes. The progress bar will not move while it installs the IntelliJ component, so please be patient. What does the lift-java-installer.exe installer do? In short, it installs and configures Java, IntelliJ, Git Bash, Xming, SpotBugs, PMD, Checkstyle, and our textbook libraries, along with accompanying command-line tools. Here is a more detailed list. How is the software licensed? All of the included software is licensed under various open-source licenses. What's the sha256sum of lift-java-installer.exe? a3759bd333311a7d55c3b4a98be26b02575be7c408f91307f5104d90177821b Can I run the installer from the command line? Yes. lift-java-installer.exe accepts optional command-line arguments, which can be useful to system administrators. Can I use a vendor and version of Java other than Temurin OpenJDK 11? Yes. You may use any version of Java 8 or newer from either Oracle or OpenJDK. However, if you do so, you will need to manually configure the Platform SDK and Project SDK in IntelliJ. We recommend sticking to the long-term support (LTS) versions: Java 8, Java 11, and Java 17. How can I check which version of Java is installed (and where it is installed)? Type the following commands in the terminal: -> javac -version javac 11.0.15 -> java -version openjdk version "11.0.15" 2022-04-19 OpenJDK Runtime Environment Temurin-11.0.15+10 (build 11.0.15+10) OpenJDK 64-Bit Server VM Temurin-11.0.15+10 (build 11.0.15+10, mixed mode) -> which java c:\Program Files\Eclipse Adoptium\jdk-11.0.15-hotspot\bin\javac -> which java c:\Program Files\Eclipse Adoptium\jdk-11.0.15-hotspot\bin\java It's important that the Java version numbers match and that you see the number 11, but the rest is not critical. How does this custom version of IntelliJ different from the standard one? IntelliJ is an industrial-strength integrated development environment (IDE), suitable for use by professional programmers. The installer configures your user preferences to make it more suitable for use by novice programmers: Disables all built-in plugins except Terminal and JUnit. Installs the SpotBugs, Checkstyle-IDEA, Run-with-Arguments, Save-Actions, and Archive browser plugins. Eliminates or reduces various popup elements (lightbulbs, code folding, breadcrumbs, gutter markers, notifications, parameter hints). Simplifies menus and toolbars, hiding advanced options. Disables live templates and postfix completion. Adopts the Obsidian Black color scheme. Auto-configures Java upon installation. Adds a few keyboard shortcuts. The course-specific project folders perform additional customizations: Streamlines autocomplete to display only relevant libraries (such as java.lang, java.util, and algs4.jar). Configures SpotBugs and Checkstyle with course-specific rules. Provides course-specific libraries (such as algs4.jar). Enables auto-formatting of code on save. Enables auto-importing of Java libraries. How can I manually configure the Platform SDK and Project SDK in IntelliJ? The installer should configure the Platform SDK automatically. To configure it manually, Navigate to File -> Project Structure -> Platform Settings -> SDKs. Click the + symbol (top left) to add an SDK. Locate an SDK. A typical location for a Java SDK on Windows is C:\Program Files\Java\jdk11.0.15. Use the shorthand name suggested by IntelliJ (e.g., 11 for version 11.0.15). To manually configure the Project SDK, Navigate to File -> Project Structure -> Settings -> Project. Choose the desired Project SDK from the drop-down list. Be sure to use 8 as the Project language level, as our autograder currently supports only Java 8 features. Which are the most important IntelliJ menu options to remember? Here are the most important ones (and their shortcuts). LIFT -> New Java Class (Ctrl + N). Create a new Java class. LIFT -> Recompile (Ctrl + B). Compile the current program. LIFT -> Run with Arguments (Ctrl + E). Run the current program with command-line arguments. File -> Save All (Ctrl + S). Save (and reformat) all open files. View -> Tool Windows -> Project (Alt + 1). Show/hide the Project View sidebar. View -> Tool Windows -> Terminal (Alt + 2). Show/hide the Terminal window. Any special characters to avoid when naming IntelliJ projects or files? Do not use an exclamation mark ! as the last character in the project folder (or any directory name along the path to your project folder); that will confuse both IntelliJ and Checkstyle. How can I create a new project in IntelliJ? If you want to inherit all of the properties of an existing project, use Windows Explorer to copy the project folder, giving it your preferred name. Delete any unwanted files. Be sure to keep the .iml file (which defines the project), the .idea subdirectory (which contains the IntelliJ course preferences), and the .lib subdirectory (which contains the course libraries). To create a new project from scratch, you can use the Create New Project option from the Welcome screen. But, we do not recommend this approach for novice programmers. Can I use a version of IntelliJ that is more recent than 2022.1.27? Yes, though if it is 2022.2 (or above), you will need to migrate your user preferences. How I can I restore the original IntelliJ settings (instead of the abbreviated novice-friendly ones)? To restore the menus and toolbars: Preferences -> Appearance & Behavior -> Menus and Toolbars -> Restore All Defaults. To restore all settings: Help -> Find Action -> Restore Default Settings. When I compile or execute a program from the command line that uses one of the textbook libraries, I get an error that it cannot find the library. How can I fix this? Make sure that you are using the appropriate wrapper script, such as javac-algs4 or java-algs4. When I open the IntelliJ embedded terminal, IntelliJ either launches the wrong version of Bash (such as WSL Bash on MinGW Bash) or produces an error message (such as "couldn't create PTY error"). How can I fix this? Navigate to File -> Settings -> Tools -> Terminal -> Shell path and replace bash with "C:\Program Files\Git\bin\bash". I get an error when I try to use execute a wrapper script (such as javac-algs4 or java-introcs). How can I fix this? Follow the advice in the previous question. Be sure that the embedded terminal launches Git Bash (and not Command Prompt, PowerShell, WSL Bash, or MinGW Bash). How should I configure Bash? If you followed our instructions, our wrapper scripts (such as javac-algs4 and java-algs4) should already be available. Our autoinstaller customizes the command line in a few ways by copying these three configuration files: .bashrc, .bash\_profile, and .inputrc. How do I break out of a program in an infinite loop? Type Ctrl-C. How do I specify EOF to signal that standard input is empty? On Mac OS X and Linux, type Enter Ctrl-D. On Windows, type Enter Ctrl-Z Enter, even in Git Bash. How can I run SpotBugs, PMD, and Checkstyle from the command line? The installer includes wrapper scripts to simplify this process. To run SpotBugs 4.2.3, type the following command in the terminal: -> spotbugs HelloWorld.class Running spotbugs on HelloWorld.class. The argument must be a list of .class files. Here is a list of bug descriptions. To run PMD 6.34.0, type the following command in the terminal: -> pmd HelloWorld.java Running pmd on HelloWorld.java. The argument must be either a single .java file or a directory containing one or more .java files. Here is a list of bug patterns. To run Checkstyle 8.31, type one of the following commands in the terminal, depending on whether you are COS 126, COS 226, or Coursera student: -> checkstyle-cos126 HelloWorld.java Running checkstyle on HelloWorld.java. -> checkstyle-cos226 HelloWorld.java Running checkstyle on HelloWorld.java. -> checkstyle-coursera HelloWorld.java Running checkstyle on HelloWorld.java. The argument must be a list of .java files. Here is a list of available checks. Can I use the Command Prompt, PowerShell, or Windows Subsystem for Linux instead of Git Bash for Windows? We strongly recommend Git Bash. For example, the commands javac-algs4 and checkstyle-algs4 will work only in Git Bash. If you want to use another shell, you'll need to configure it yourself. Which Linux-style commands are available in Git Bash for Windows? Here are the Bash built-in commands and here are the external commands in C:\Program Files\Git\usr\bin.

