Practical no. 1 FS19CO042

#### Aim:

Getting started with Java Application Development using IDE

- 1.1 Check whether latest version of java (at least JDK 1.8) is installed or not. If not then download and install it.
- 1.2 Download and install the IntelliJ IDEA Community Edition/ NetBeans IDE 8.1/ Eclipse Neon or later version of IDE
- 1.3 Create a Java Project/ Application in the IDE
- 1.4 Create a Java class Person containing two variables name and yearOfBirth of appropriate data types, take inputs from the command line argument, a method to display the name and age of the person.
- 1.5 Save the project and run it.
- 1.6 Explore all the features (the menu and shortcuts) of the IDE. Learn about their use

**Tool used:** Editor (Notepad/Intellij IDE), JDK and JRE

#### Code:

# 1.1 Check whether latest version of Java (at least JDK 1.8) is installed or not. If not then download and install it.

• Check if java compiler(javac) and jvm (java) are installed properly on system. Type these commands:

javac -version java -version

```
Windows PowerShell
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Try the new cross-platform PowerShell https://aka.ms/pscore6

PS C:\Users\ADMIN> javac -version
javac 1.8.0_251

PS C:\Users\ADMIN> java -version
java version "1.8.0_251"

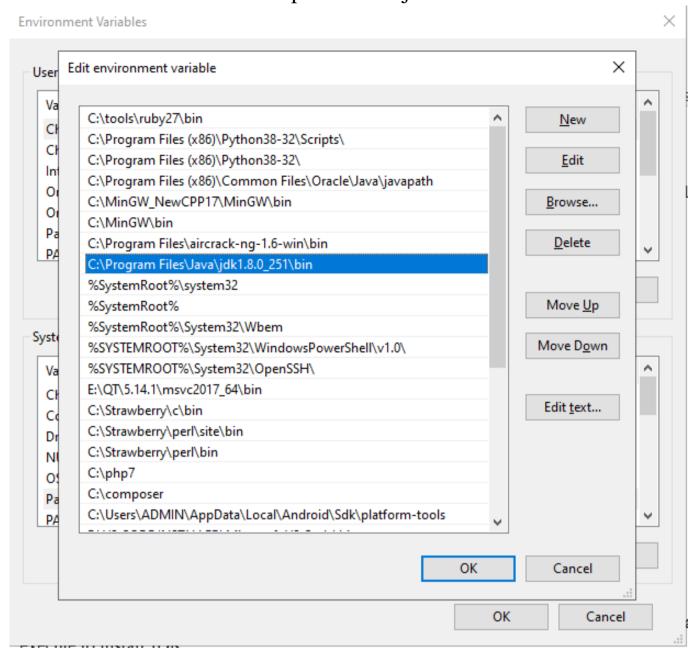
Java(TM) SE Runtime Environment (build 1.8.0_251-b08)

Java HotSpot(TM) Client VM (build 25.251-b08, mixed mode)

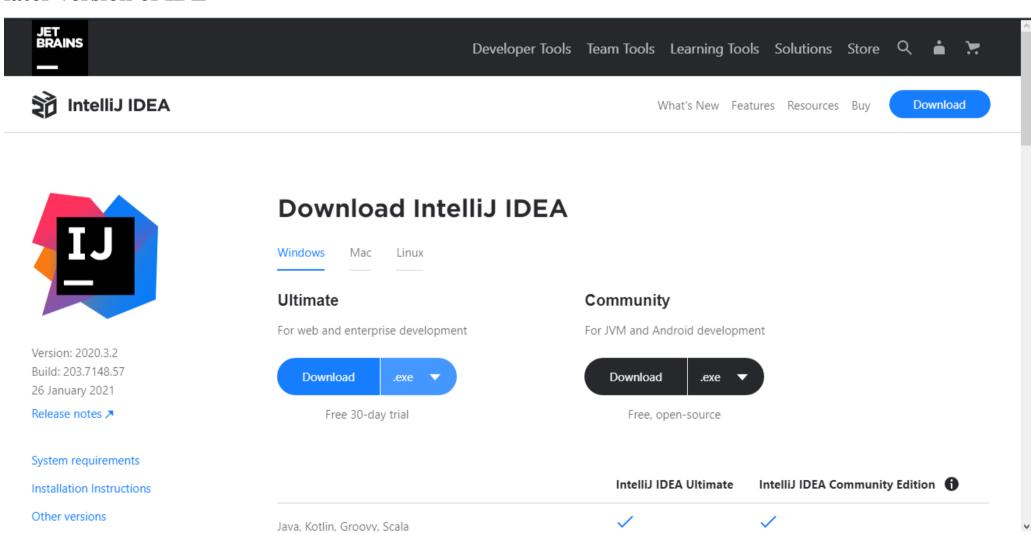
PS C:\Users\ADMIN>
```

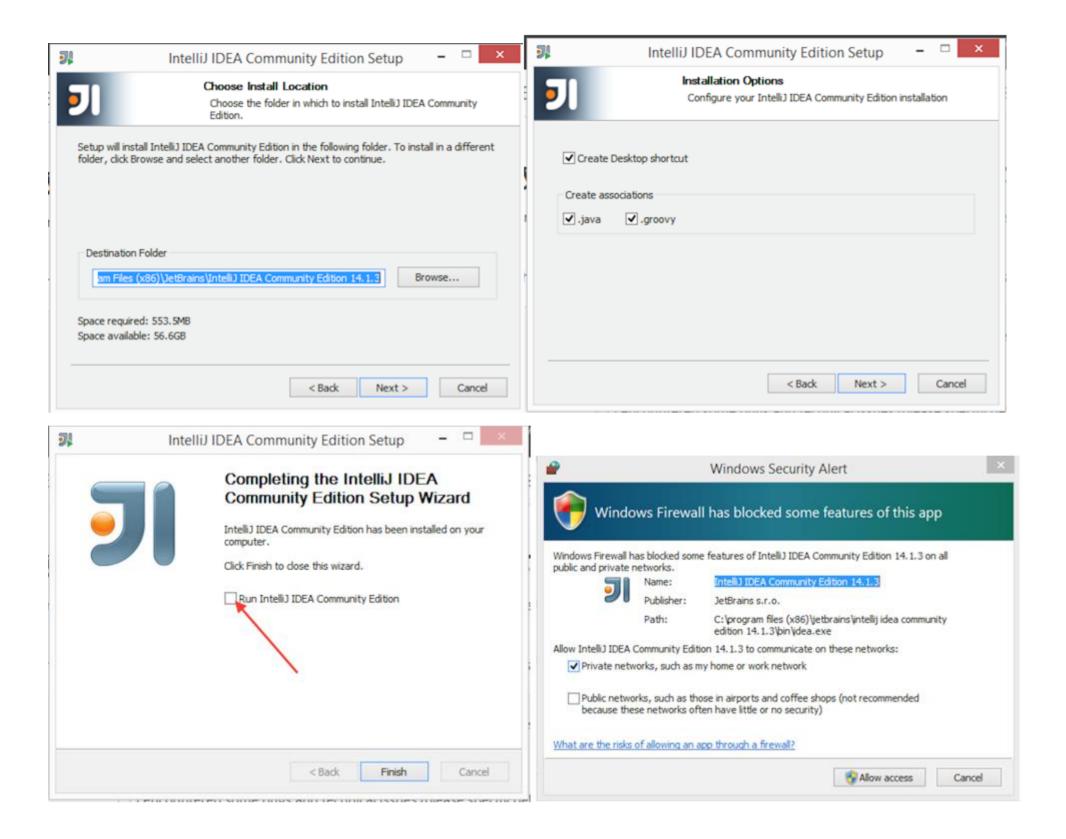
• If java compiler or jvm is not installed on system, download executibles from Oracle.com and execute to install JDK.

• Set environment variables to path where java is installed.

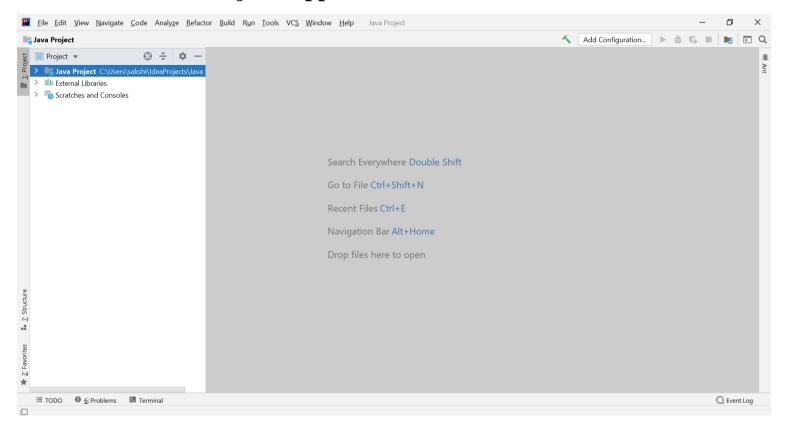


# 1.2 Download and install the IntelliJ IDEA Community Edition/ NetBeans IDE 8.1/ Eclipse Neon or later version of IDE





### 1.3 Create a Java Project/ Application in the IDE



# 1.4 Create a Java class Person containing two variables name and yearOfBirth of appropriate data types, take inputs from the command line argument, a method to display the name and age of the person.

```
public class Person
{
    String name;
    int yearOfBirth;

public static void disp_details(String a,int b)
    {
        int current_year=2021;
        int age=current_year-b;
        System.out.println("name is "+a+" and age is "+age);
    }

public static void main(String [] args )
    {
        disp_details("sakshi",2004);
    }
}
```

## 1.5 Save the project and run it.

#### output:

```
Runx Parson ×

"C:\Program Files\Java\jdk-15\bin\java.exe" "-javaagent:C:\Program Files\JetBrains\IntelliJ IDEA Community Edition 2020.2.3\lib\idea_rt.jar=65391: name is John and age is 21

Process finished with exit code 0
```

## 1.6 Explore all the features (the menu and shortcuts) of the IDE. Learn about their use

Shortcut	Action
Double Shift	Search Everywhere
	Find anything related to IntelliJ IDEA or your project and open it, execute it, or jump to it.
Ctrl+Shift+A	Find Action
	Find a command and execute it, open a tool window or search for a setting.
Alt+Enter	Show intention actions and quick-fixes
	Fix highlighted error or warning, improve or optimize a code construct.
F2	Navigate between code issues
Shift+F2	Jump to the next or previous highlighted error.
Ctrl+E	<u>View recent files</u>
	Select a recently opened file from the list.
Ctrl+Shift+Enter	Complete current statement
	Insert any necessary trailing symbols and put the caret where you can start typing the next statement.
Ctrl+Alt+L	Reformat code
	Reformat the whole file or the selected fragment according to the current code style settings.
Ctrl+Alt+Shift+T	Invoke refactoring

	Refactor the element under the caret, for example, safe delete, copy, move, rename, and so on.
Ctrl+W Ctrl+Shift+W	Extend or shrink selection
	Increase or decrease the scope of selection according to specific code constructs.
Ctrl+/ Ctrl+Shift+/	Add/remove line or block comment
	Comment out a line or block of code.
Ctrl+B	Go to declaration
	Navigate to the initial declaration of the instantiated class, called method, or field.
Alt+F7	<u>Find usages</u>
	Show all places where a code element is used across your project.
Alt+1	Focus the Project tool window
Escape	Focus the editor

Conclusion: Thus, we verified/installed java and IntelliJ IDE and ran first program on it. We also explored various features of the IDE.