EX : 1 Installation of WEKA Tool

WEKA Machine Learning Tool

WEKA is used by machine learning and applied sciences researchers for learning purposes. It is an efficient tool for carrying out many data mining tasks.
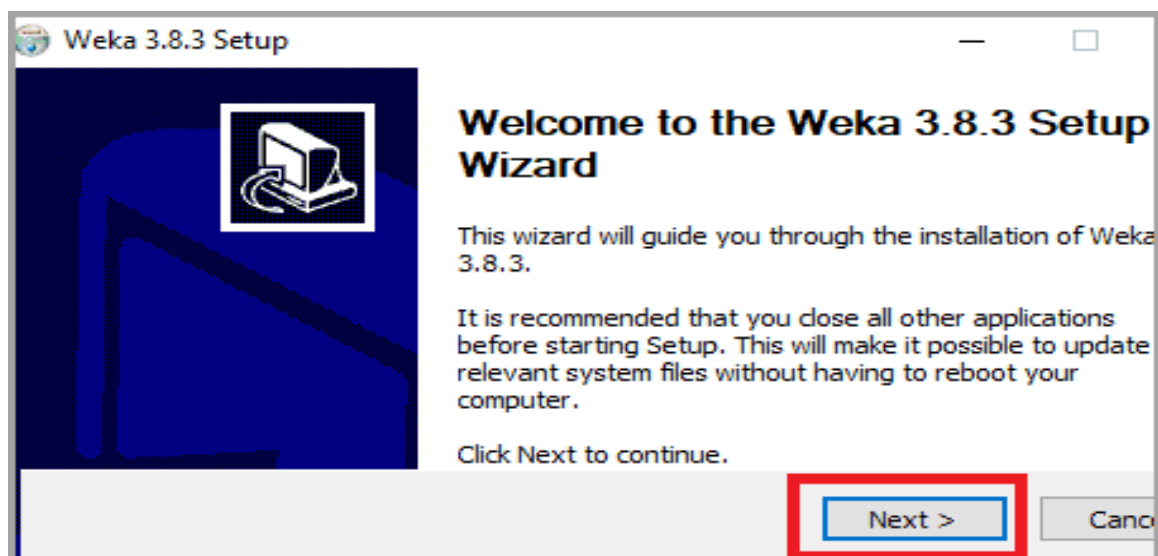
WEKA Download And Installation

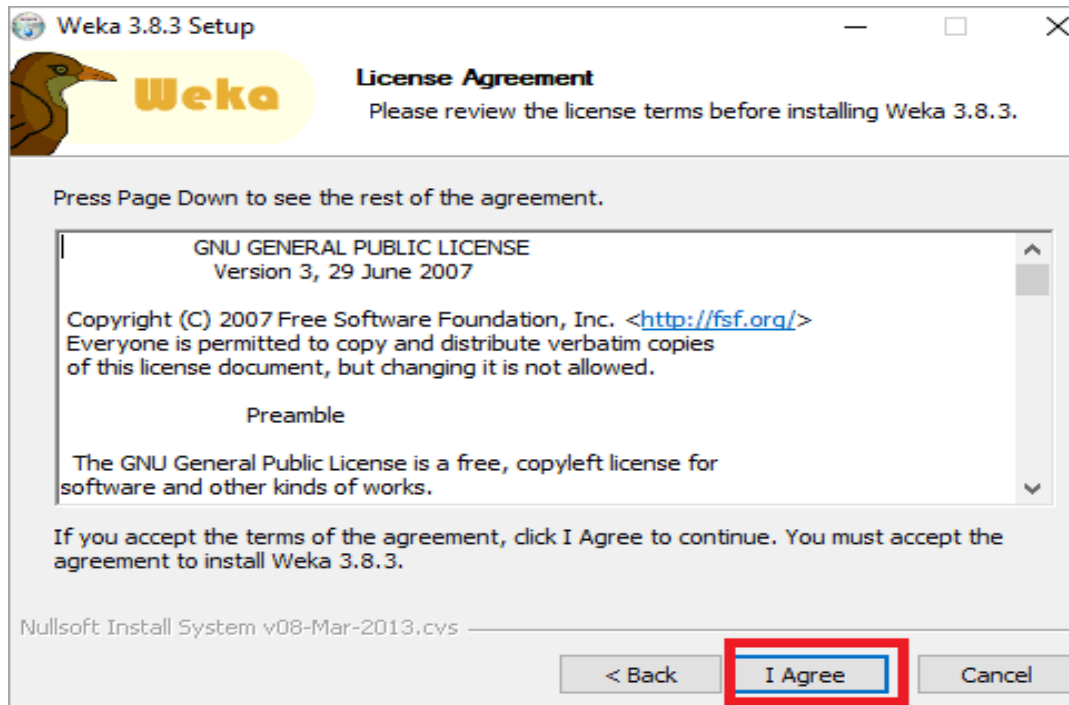**STEP 1 :** Download the software from **here.**

Check the configuration of the computer system and download the stable version of WEKA (currently 3.8) from this page.
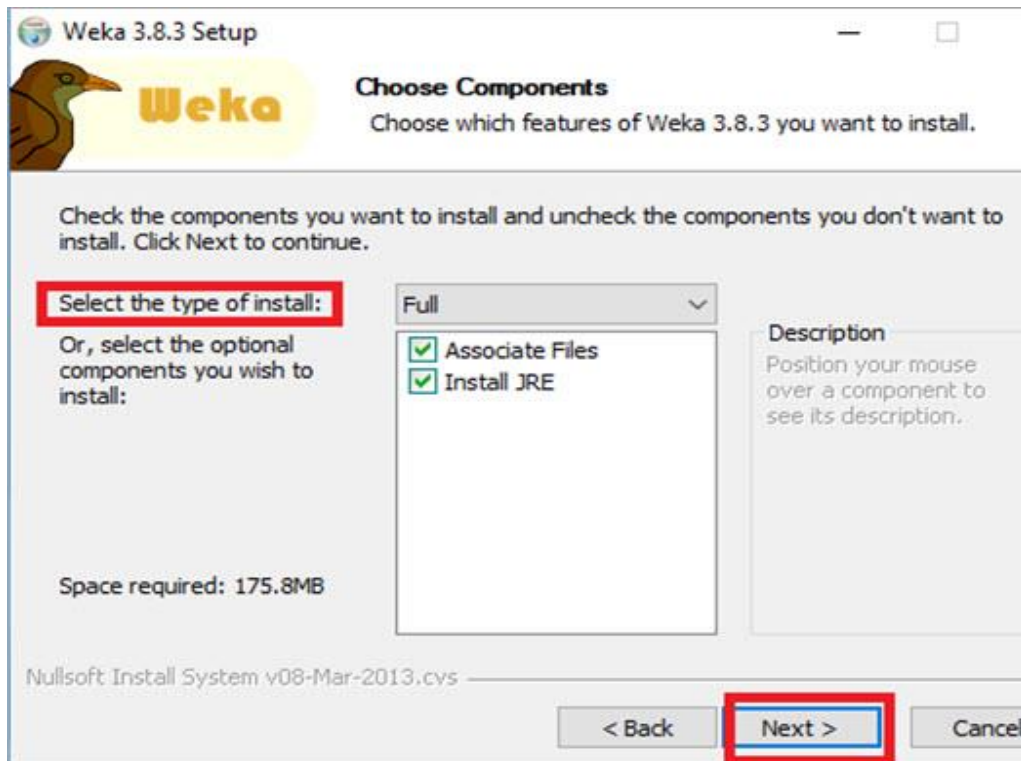

STEP 2 : After successful download, open the file location and double-click on the downloaded file. The Step Up wizard will appear. Click on Next.
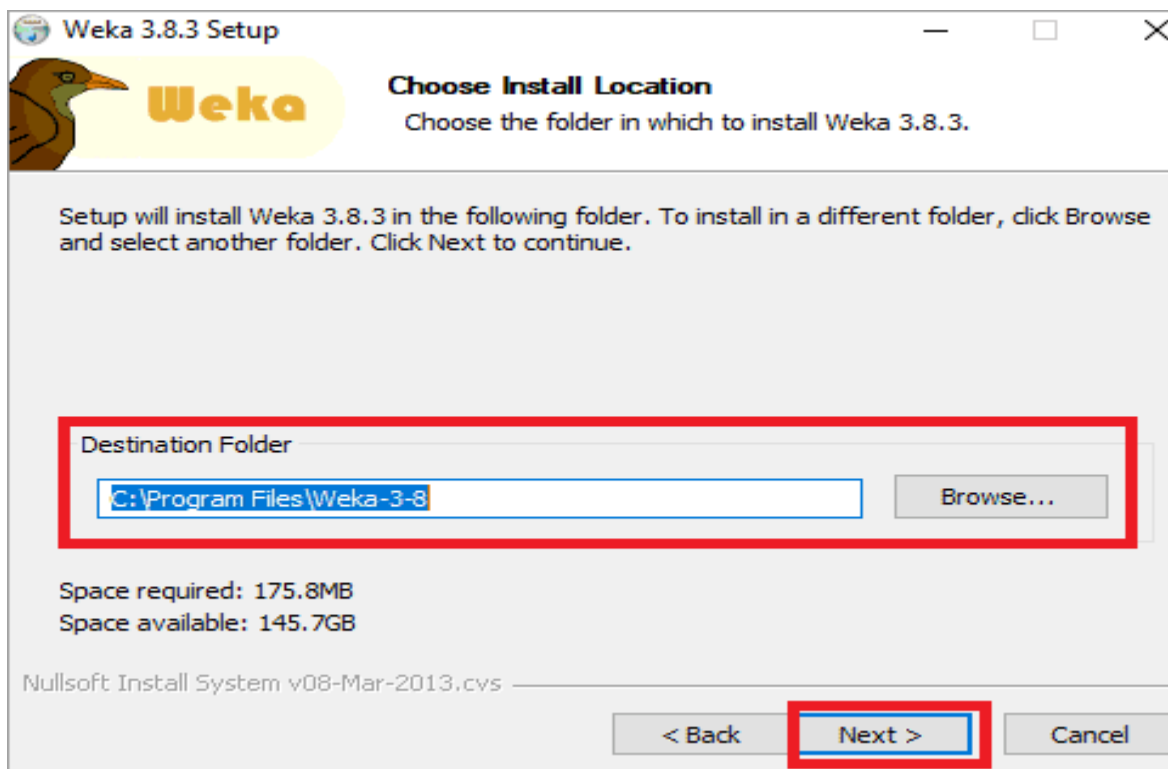
STEP 3 : The License Agreement terms will open. Read it thoroughly and click on "I Agree".
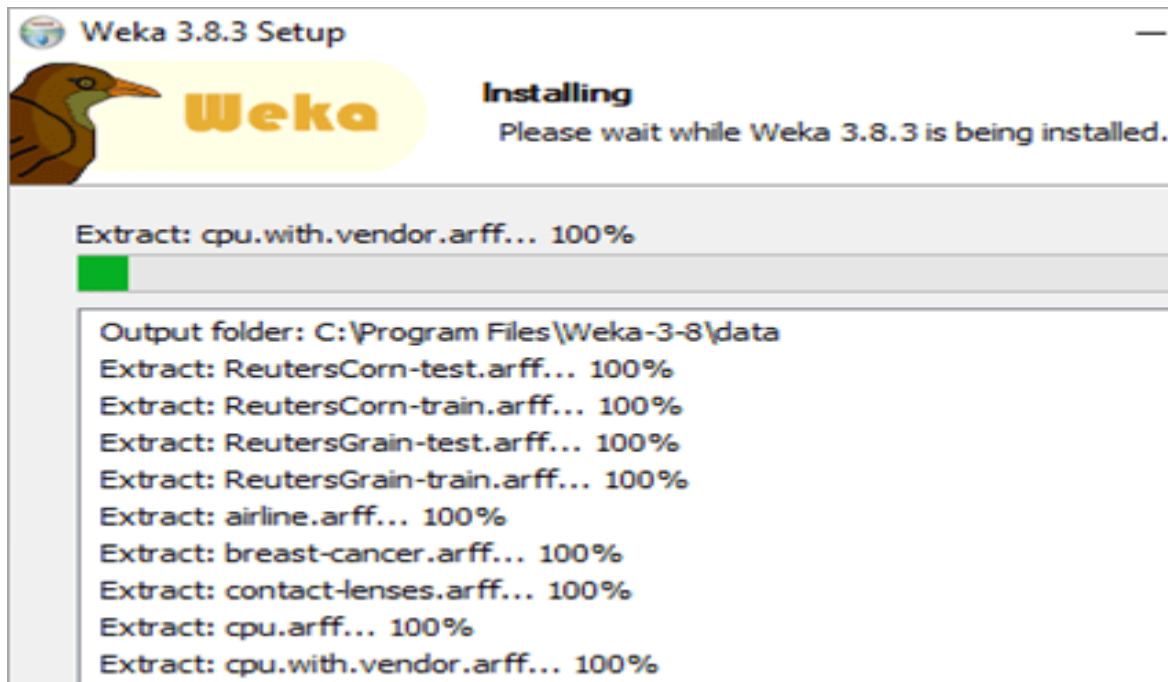

STEP 4 : According to your requirements, select the components to be installed. Full component installation is recommended. Click on Next.

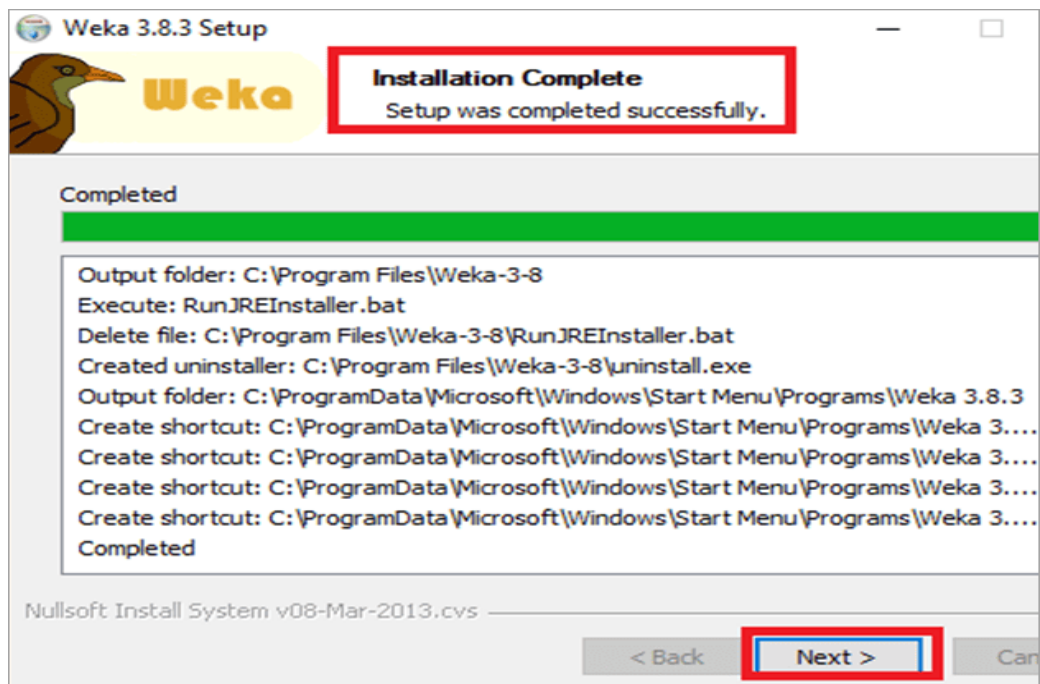**STEP 5 :** Select the destination folder and Click on Next.

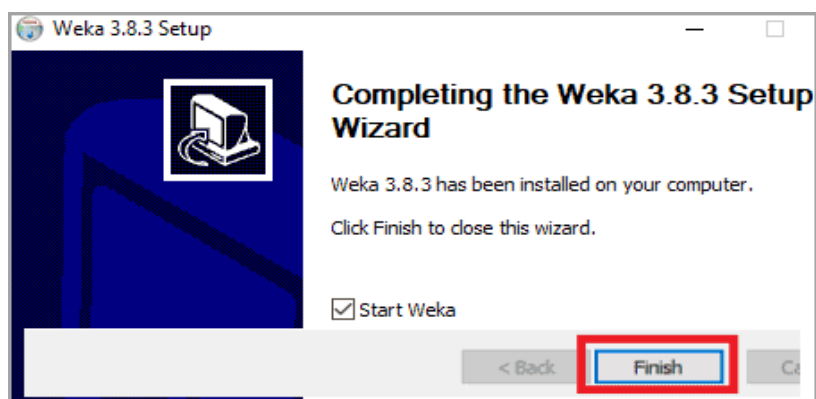**STEP 6 :** Then, Installation will start.

STEP 7 : If Java is not installed in the system, it will install Java first.

STEP 8 : After the installation is complete, the following window will appear. Click on Next.

STEP 9 : Select the Start Weka checkbox. Click on Finish.

STEP 10 : WEKA Tool and Explorer window opens.

STEP 11 : The WEKA manual can be downloaded from **here.**

Graphical User Interface Of WEKA

The GUI of WEKA gives five options: Explorer, Experimenter, Knowledge flow,

Workbench, and Simple CLI. Let us understand each of these individually.

1) Simple CLI

```
java <classname> <args>
            Lists the capabilities of the specified class.
            If the class is a weka.core.OptionHandler then
            trailing options after the classname will be
            set as well.

kill
            Kills the running job, if any.

script <script_file>
            Executes commands from a script file.

set [name=value]
            Sets a variable.
            If no key=value pair is given all current variables are l

unset name
            Removes a variable.


Notes:
- Variables can be used anywhere using '${<name>}' with '<name>'
  being the name of the variable.
- Environment variables can be used with '${env.<name>}',
  e.g., '${env.PATH}' to retrieve the PATH variable.


help
```
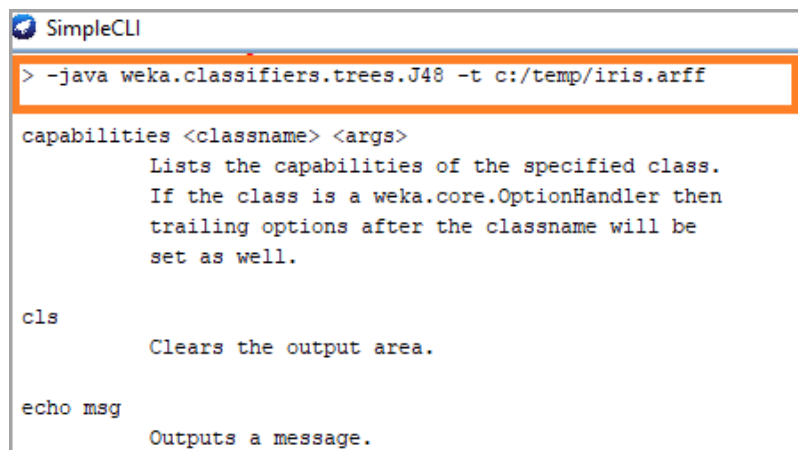
Simple CLI is Weka Shell with command line and output. With "help", the overview of all the commands can be seen. Simple CLI offers access to all classes such as classifiers, clusters, filters, etc.

Some of the simple CLI commands are:

- **Break:** To stop the current thread
- **Exit:** Exit the CLI
- **Help[<command>] :** Outputs the help for the specified command
- **-java weka.classifiers.trees.J48 -t c:/temp/iris.arff :** To invoke a WEKA class, prefix it with Java. This command will direct WEKA to load the class and execute it with the given parameters. In this command, J48 classifier is invoked on the IRIS dataset.
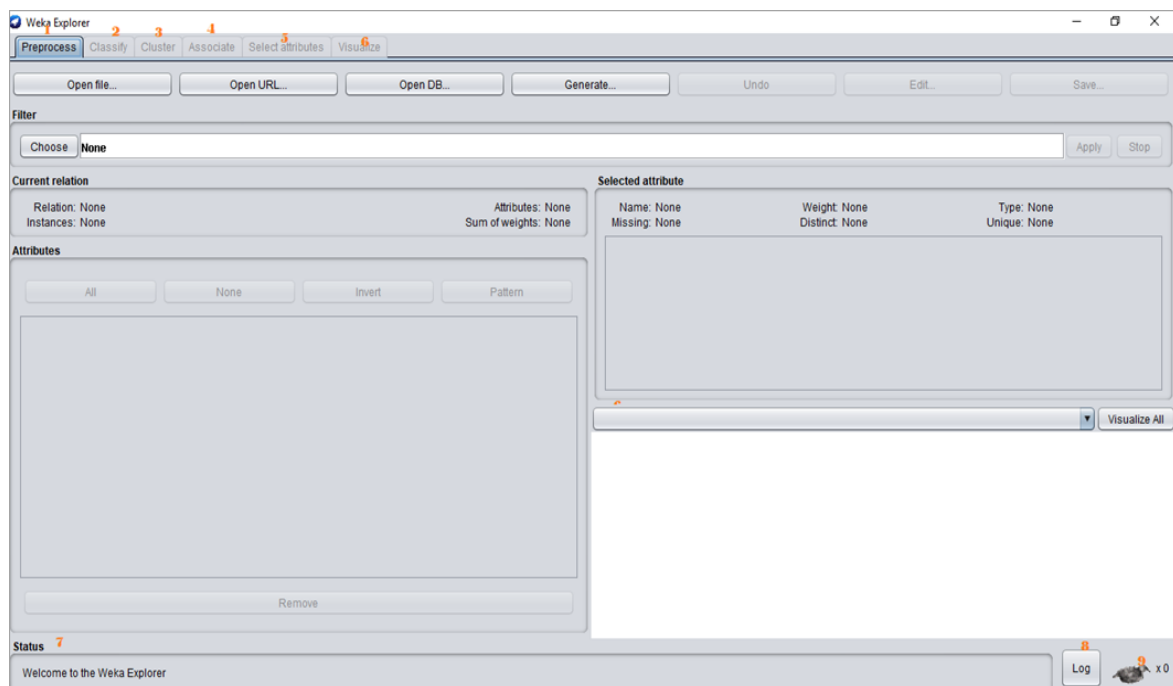

2) Explorer

The WEKA Explorer windows show different tabs starting with preprocessing. Initially, the preprocess tab is active, as first the data set is preprocessed before applying algorithms to it and exploring the dataset.

RESULT