

**Some intro**

**Setup :**

1. using installing the JDK and develop the application in Notepad and execute it on the command prompt.
2. install any IDE (STS)

**IDE (Integrated Development Environment)**

**IDE intelligence**

**shortcut keys**

**System.out.println(""); sout, syso + ctrl+spacebar**  
**generate some dynamic code.**

**VScode--**

**Eclipse ---universal JAVA IDE**

**IntelliJ:--community edition, Ultimate edition**

**STS (Eclipse + with some built-in plugin to develop Spring boot application)**

**NetBeans**

**RAD**

**setup 1: installing JDK and developing java application manually using Notepad and cmd.**

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**JDK 8 or above:**

**after downloading the JDK install the JDK as a ordinary s/w.**

**after installation we need to set some environment to develop our first java application.**

**Java has 3 categories:**

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**1.J2SE (java 2 standard edition) ---base editon/ core edition for remaining 2 editions**

**2.J2EE (Java 2 Enterprise edition)**

**3.J2ME(Java 2 miro edition)**

**--J2SE : it is a specification, from sun microsystem(it is a documentation contains some rules and guidelines to develop a s/w product)**

**--the implementation of this J2SE specification is JDK s/w.**

1. Java application development: (JDK)

2. Java application running/ using /consuming : (JRE)

in most of the computer JRE is inbuilt.

.jar file -----> aws JRE

First.java:

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```
class Demo {  
  
    public static void main(String[] args){  
  
        System.out.println("Welcome to Java");  
  
    }  
  
}
```

>javac First.java

--here compiler will generate the .class file according to the class name.

ex:

Demo.class

--to execute the .class file we need to invoke the JVM: and pass the class name in which main method is there, without the extension.

ex:-

>java Demo

\*\*\*Note: Inside a single .java file we can have multiple classes.

example:

**First.java:**

-----

```
class Demo1 {  
  
    public static void main(String[] args){  
  
        System.out.println("Welcome to Java Demo1");  
  
    }  
}  
  
class Demo2 {  
  
    public static void main(String[] args){  
  
        System.out.println("Welcome to Java Demo2");  
  
    }  
}  
  
class Demo3 {  
  
    public static void main(String[] args){  
  
        System.out.println("Welcome to Java Demo3");  
  
    }  
}
```

**>javac First.java**

**here we will get 3 .class files (for each class one seperate .class file)**

**Note: while running the java application we can run atmost only once class at a time.**

**--if inside a .java file any class is public then we can not save that file with any name, we must save that file with public class name.otherwise we will get a compilation error.**

**\*\*\*Note: in a single .java file we can have atmost only one class can be public, and the name of that file should be public class name.**

**--we should keep only one class inside a single .java file. and we should save that file with the class name only.**