**Scala Document**

Scala is a modern multi-paradigm programming language designed to express common programming patterns in a concise, elegant, and type-safe way. It smoothly integrates features of object-oriented and functional languages

Open the Scala worksheet

**Scalculator**

2+ 5;

34/2;

**Operators are methods**

(1).+(2) //> 3

**Notes :**

**Difference between using App trait and main method in scala**

What is the difference between

object Application extends App {

println("Hello World")

}

and

object Application {

def main(args: Array[String]): Unit = {

println("Hello World");

}

The App trait is a convenient way of creating an executable scala program. The difference to the main method altenative is (apart from the obvious syntactic differences) that the App trait uses the delayed initalization feature.

From the release notes for 2.9 (see <http://www.scala-lang.org/old/node/9483> )

**Main method in Scala**

class MyScalaClass{

def main(args: Array[String]): Unit = {

println("Hello from main of class")

}enter code here

}

Compiled from "MyScalaClass.scala"

public class MyScalaClass {

public void main(java.lang.String[]);

public MyScalaClass();

}

So it means that when the scala class is converted to java class then the main method of the scala class which in turn being converted to the main method in java class is **not static**. And hence we would not be able to run the program because JVM is not able to find the starting point in the program

But if the same code is done by using the **'object'** keyword then:

Compiling the following:

object MyScalaClass{

def main(args: Array[String]): Unit = {

println("Hello from main of object")

}

}

Decompiling the following:

javap MyScalaClass$.class

Compiled from "MyScalaClass.scala"

public final class MyScalaClass$ {

public static final MyScalaClass$ MODULE$;

public static {};

public void main(java.lang.String[]);

}

Decompiling the following

javap MyScalaClass.class

Compiled from "MyScalaClass.scala"

public final class MyScalaClass {

public static void main(java.lang.String[]);

}

So here we got**public static void main in MyScalaClass.class** therefore the main method can be executed directly by the JVM here.