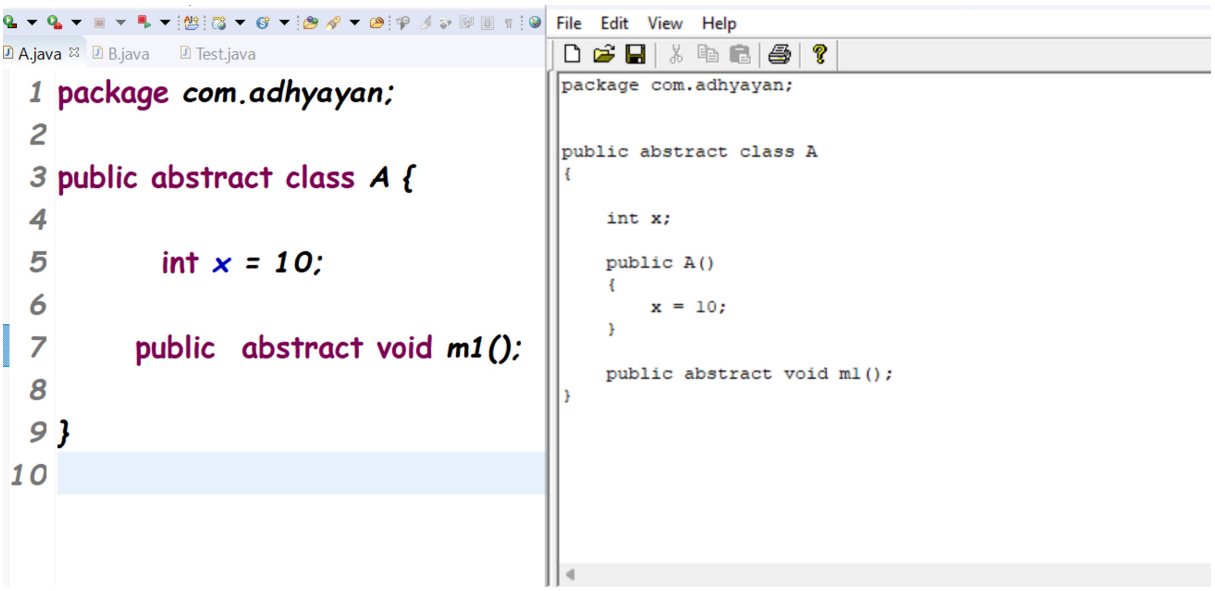
Tuesday, October 15, 2024 11:45 AM

abstract class

What is abstract class?
-> the class which contains abstract as well as concrete methods known as abstract class
-> we can write method with implementation
-> constructor is present in abstract constructor in abstract class is use initialize instance variable only
-> we can't create object of abstract class
-> if we want to access abstract class methods and variable we need to create child compulsory
-> if we want to declare abstract method in class then class must be declared with abstract keyword
-> variables in abstract class is not by default public static final
-> abstract methods in abstract class is not by default public abstract we need declare

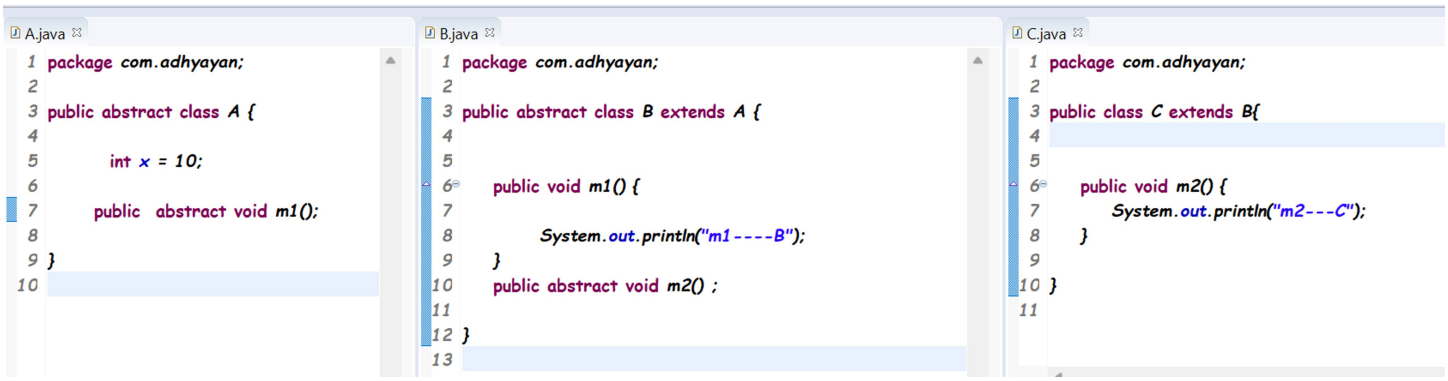



```java
package com.adhyayan;

public abstract class A {

        int x = 10;

      public  abstract void m1();

}
```

```java
package com.adhyayan;


public abstract class A
{

    int x;

    public A()
    {
        x = 10;
    }

    public abstract void m1();
}
```

Note* interface is use to achieve full abstraction and abstract class is use to achieve partial abstraction

E.x




```java
package com.adhyayan;

public abstract class A {

        int x = 10;

      public  abstract void m1();

}
```

```java
package com.adhyayan;

public abstract class B extends A {


    public void m1() {

          System.out.println("m1----B");
    }
    public abstract void m2() ;

}
```

```java
package com.adhyayan;

public class C extends B{


    public void m2() {
        System.out.println("m2---C");
    }

}
```

Test.java

```java
package com.adhyayan;

public class Test {

    public static void main(String[] args) {

        System.out.println("main----start");
            A a = new C();
              a.m1();
        System.out.println("main----ends");

    }
}
```