

Name: Hitendra Sisodia  
Sap id: 500091910

## Lab 7

Ques1: Write a Java program to implement the concept of importing classes from user defined package.

### Source Code

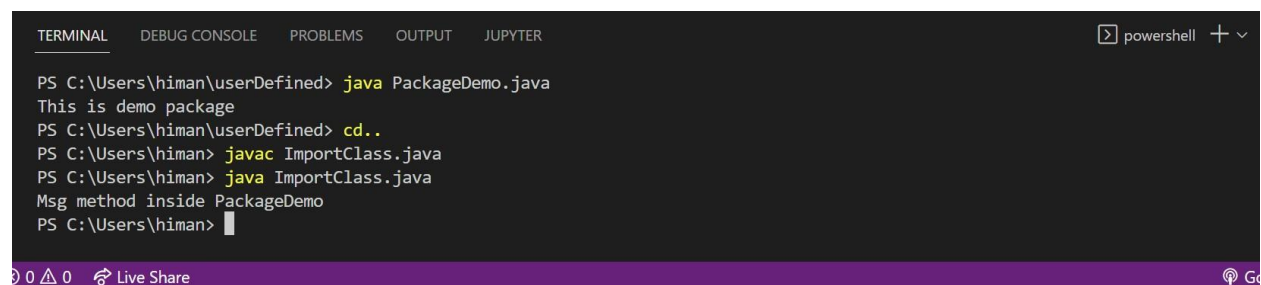
```
package UserDefined;

public class PackageDemo {
    public static void main(String args[]) {
        System.out.println("This is demo package");
    }
    public void msg() {
        System.out.println("Msg method inside PackageDemo");
    }
}

import UserDefined.PackageDemo;

public class ImportClass{
    public static void main(String args[]){
        PackageDemo obj1 = new PackageDemo();
        obj1.msg();
    }
}
```

### Output



```
TERMINAL  DEBUG CONSOLE  PROBLEMS  OUTPUT  JUPYTER  powershell + v
PS C:\Users\himan\userDefined> java PackageDemo.java
This is demo package
PS C:\Users\himan\userDefined> cd..
PS C:\Users\himan> javac ImportClass.java
PS C:\Users\himan> java ImportClass.java
Msg method inside PackageDemo
PS C:\Users\himan>
```

Name: Hitendra Sisodia  
Sap id: 500091910

## Lab 7

Ques2: Write a program to make a package Balance. This has an Account class with Display\_Balance method. Import Balance package in another program to access Display\_Balance method of Account class.

### Source Code

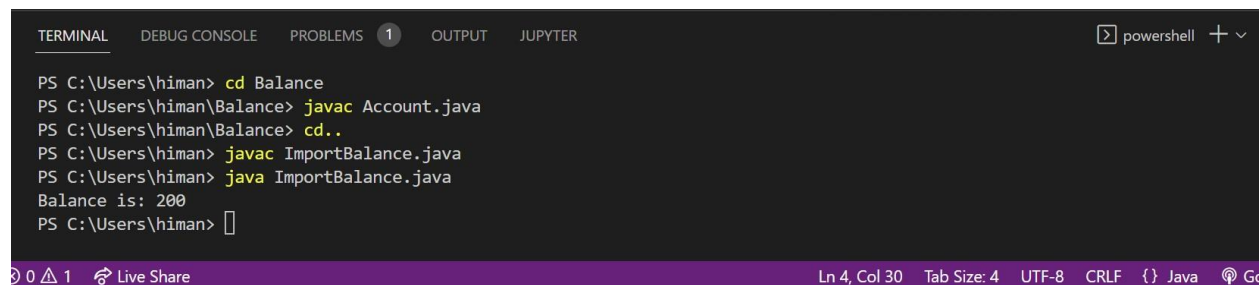
```
package Balance;

public class Account {
    static int balance = 200;
    static public void Display_Balance() {
        System.out.println("Balance is: "+balance);
    }
}

import Balance.Account;

public class ImportBalance {
    public static void main(String args[]) {
        Account obj = new Account();
        obj.Display_Balance();
    }
}
```

### Output



```
TERMINAL  DEBUG CONSOLE  PROBLEMS 1  OUTPUT  JUPYTER  powershell + v

PS C:\Users\himan> cd Balance
PS C:\Users\himan\Balance> javac Account.java
PS C:\Users\himan\Balance> cd..
PS C:\Users\himan> javac ImportBalance.java
PS C:\Users\himan> java ImportBalance.java
Balance is: 200
PS C:\Users\himan>
```

0 1 Live Share Ln 4, Col 30 Tab Size: 4 UTF-8 CRLF {} Java G

Name: Hitendra Sisodia  
Sap id: 500091910

## Lab 7

Ques3: WAP to create a package p with class A with 4 types of access protected methods. Show which of these methods can be used in different package's class i.e. there is main() in class B in package Q and 4 methods are in Class A in package p.

### Source Code

```
package p;

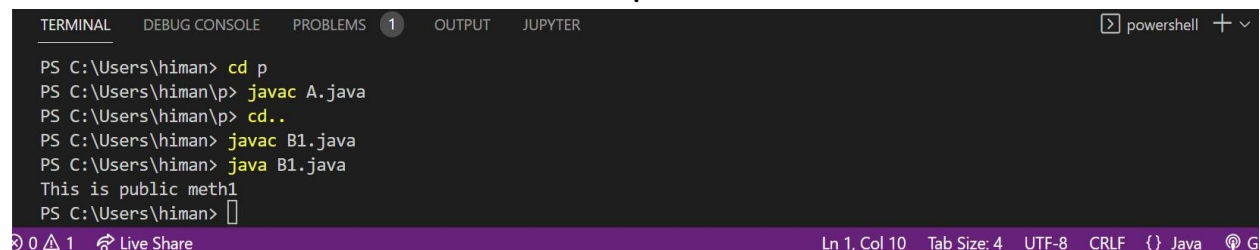
public class A{
    public void meth1(){
        System.out.println("This is public meth1");
    }
    private void meth2(){
        System.out.println("This is meth2");
    }
    void meth3(){
        System.out.println("This is meth3");
    }
    protected void meth4(){
        System.out.println("This is meth4");
    }
    public static void main(String args[]){
        A obj = new A();
        obj.meth1();
    }
}
```

a)

```
package Q;
import p.A;

public class B1{
    public static void main(String args[]){
        A obj1 = new A();
        obj1.meth1();
    }
}
```

### Output



```
TERMINAL  DEBUG CONSOLE  PROBLEMS  1  OUTPUT  JUPYTER  powershell  + v
PS C:\Users\himan> cd p
PS C:\Users\himan\p> javac A.java
PS C:\Users\himan\p> cd..
PS C:\Users\himan> javac B1.java
PS C:\Users\himan> java B1.java
This is public meth1
PS C:\Users\himan>
```

Name: Hitendra Sisodia  
Sap id: 500091910

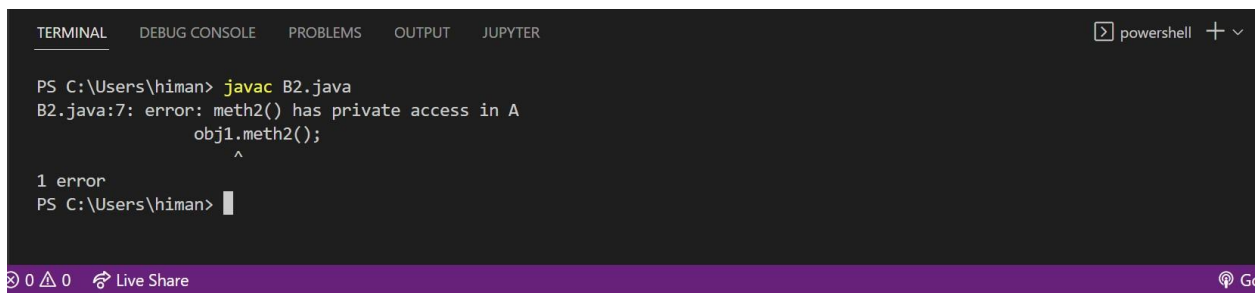
## Lab 7

b)

```
package Q;
import p.A;

public class B2{
    public static void main(String args[]){
        A obj1 = new A();
        obj1.meth2();
    }
}
```

### Output



The screenshot shows a terminal window with the following content:

```
TERMINAL  DEBUG CONSOLE  PROBLEMS  OUTPUT  JUPYTER  powershell + v
PS C:\Users\himan> javac B2.java
B2.java:7: error: meth2() has private access in A
    obj1.meth2();
           ^
1 error
PS C:\Users\himan>
```

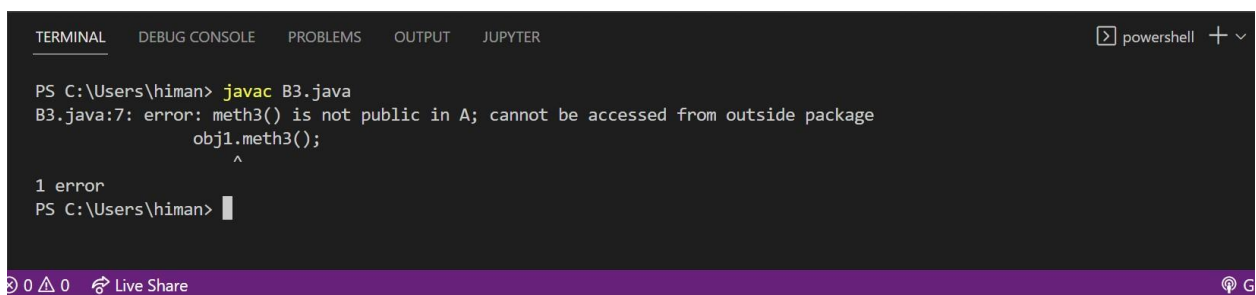
The error message indicates that the `meth2()` method in class `A` is private and cannot be accessed from class `B2`.

c)

```
package Q;
import p.A;

public class B3{
    public static void main(String args[]){
        A obj1 = new A();
        obj1.meth3();
    }
}
```

### Output



The screenshot shows a terminal window with the following content:

```
TERMINAL  DEBUG CONSOLE  PROBLEMS  OUTPUT  JUPYTER  powershell + v
PS C:\Users\himan> javac B3.java
B3.java:7: error: meth3() is not public in A; cannot be accessed from outside package
    obj1.meth3();
           ^
1 error
PS C:\Users\himan>
```

The error message indicates that the `meth3()` method in class `A` is not public and cannot be accessed from class `B3`.

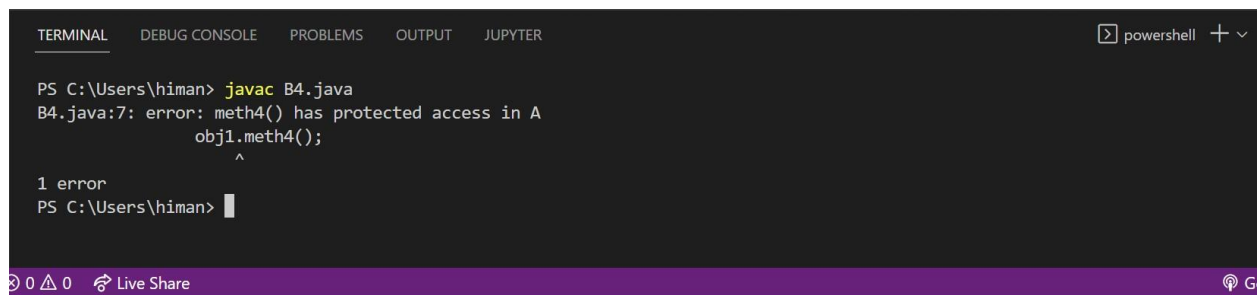
Name: Hitendra Sisodia  
Sap id: 500091910

## Lab 7

d)

```
package Q;  
import p.A;  
  
public class B4{  
    public static void main(String args[]){  
        A obj1 = new A();  
        obj1.meth4();  
    }  
}
```

## Output



The screenshot shows a terminal window with a dark background and a purple status bar at the bottom. The terminal displays the command `javac B4.java` and a compilation error: `B4.java:7: error: meth4() has protected access in A`. The error points to the line `obj1.meth4();`. Below the error message, it says `1 error`. The terminal prompt is `PS C:\Users\himan>`. The status bar at the bottom shows `0 0 0`, `Live Share`, and a `G` icon.

```
TERMINAL  DEBUG CONSOLE  PROBLEMS  OUTPUT  JUPYTER  powershell + v  
PS C:\Users\himan> javac B4.java  
B4.java:7: error: meth4() has protected access in A  
    obj1.meth4();  
           ^  
1 error  
PS C:\Users\himan>
```