

Practical 7 W A P to demonstrate concept of different type of access modifiers using Package

Default access modifier:

Addition.java

```
package abcpackage;
```

```
public class Addition
```

```
{  
    int addTwoNumbers(int a, int b)  
    {  
        return a+b;  
    }  
}
```

Test.java

```
package xyzpackage;
```

```
import abcpackage.*;
```

```
public class Test
```

```
{  
    public static void main(String args[])  
    {  
        Addition obj = new Addition();  
        obj.addTwoNumbers(10, 21);  
    }  
}
```

Output:

Exception in thread "main" java.lang.Error: Unresolved compilation problem:

The method addTwoNumbers(int, int) from the type Addition is not visible

at xyzpackage.Test.main(Test.java:12)

Private access modifier:

```
class ABC
```

```
{
```

```
    private double num = 100;
```

```
    private int square(int a)
```

```
    {
```

```
        return a*a;
```

```
    }
```

```
}
```

```
public class Example
```

```
{
```

```
    public static void main(String args[])
```

```
    {
```

```
        ABC obj = new ABC();
```

```
        System.out.println(obj.num);
```

```
        System.out.println(obj.square(10));
```

```
    }
```

```
}
```

Output:

Compile - time error

Protected Access Modifier:**Addition.java**

```
package abcpackage;

public class Addition
{
    protected int addTwoNumbers(int a, int b)
    {
        return a+b;
    }
}
```

Test.java

```
package xyzpackage;

import abcpackage.*;

class Test extends Addition
{
    public static void main(String args[])
    {
        Test obj = new Test();

        System.out.println(obj.addTwoNumbers(11, 22));
    }
}
```

Output:

33

Public access modifier

```
package abcpackage;  
  
public class Addition  
{  
    public int addTwoNumbers(int a, int b)  
    {  
        return a+b;  
    }  
}
```

Test.java

```
package xyzpackage;  
  
import abcpackage.*;  
  
class Test  
{  
    public static void main(String args[])  
    {  
        Addition obj = new Addition();  
        System.out.println(obj.addTwoNumbers(100, 1));  
    }  
}
```

Output:

101