

```

import java.util.*;
import accessModifiers1.A;
public class A
{
    int x= 10;
    private int y = 15;
    public int z= 20;
    protected int w= 25;

    public static void main (String[] args)
    {
        A obj=new A();
        System.out.println(obj.x);
        System.out.println(obj.y);
        System.out.println(obj.z);
        System.out.println(childObj.w);
    }
}

```

```

//*****//
import java.util.*;
import accessModifiers1.A;
public class B
{
    public static void main (String[] args)
    {
        A obj=new A();
        System.out.println(obj.x);
        System.out.println(obj.y); //private not accessible outside the class
        System.out.println(obj.z); //public is accessible everywhere outside the class
        System.out.println(childObj.w); //protected will be visible in different package in
        subclass using object
    }
}

```

```

//*****//
import java.util.*;
import accessModifiers2;

public class C extends A{
    public static void main (String[] args)
    {
        A obj=new A();
        C childObj = new C();
        // System.out.println(childObj.x);
        // System.out.println(childObj.y); //private not accessible outside the class
    }
}

```

```
System.out.println(obj.z);
System.out.println(childObj.w); //protected will be visible in different package in
subclass using object
```

```
}
}
```

```
//*****//
```

```
import java.util.*;
import accessModifiers1.A;
public class D
{
    public static void main (String[] args)
    {
        A obj=new A();
        System.out.println(obj.x);
        System.out.println(obj.y);
        System.out.println(obj.z);
        System.out.println(obj.w); //protected will not be accessible outside package in
non-subclass
    }
}
```

```
/////*****Encapsulation*****/////
```

```
import java.util.*;
import encapsulation;
class Demo
{
    private int a =5;

    private int b =10

    private int c =15;

    private int d =20;
}
public int getA()
{
    System.out.println("Value of B read");
    return this.a;
}
public int getB()
{
    System.out.println("Value of B read");
    return this.b;
}
```

```
}
```

```
public void SetA(int a)
{
    if(a>100)
    {
        this.a = a;
        System.out.println("Value of A changed to: "+a);
    }
    else
    {
        System.out.println("Cannot set");
    }
}
```

```
public void setB(int b)
{
    this.b =b;
}
```

```
public int getC()
{
    return c;
}
```

```
public void setD(int d)
{
    this.d = d;
}
```

```
public class EncapStudy
{
    public static void main(String[] args)
    {
        Demo d = new Demo()
        System.out.println(d.a); //not visible because private
        System.out.println(d.getA());
        d.setA(100);
        System.out.println(d.getA());
    }
}
```