

2. Writing a program in Java to implement access modifiers.

### ALGORITHM

**Step 1:** Start

**Step 2:** Create a default method and call the same method from main class.

**Step 3:** Create a private method and try calling from main class.

**Step 4:** Create a protected method and call from another package

**Step 5:** Create a public method and call from another package.

**Step 6:** Stop

### SOURCE CODE

```
package assistedPracticeProject;

import java.util.Scanner;

class default_project
{
    void read()
    {
        Scanner sc=new Scanner(System.in);

        System.out.println("Enter age:");

        int age=sc.nextInt();

        System.out.println("AGE = "+age);

    }
}

public class Practice_Project2_default
{
    public static void main(String args[])
    {
    }
```

```

        {
            System.out.println("DEFAULT ACCESS MODIFIER\n");
            default_project d1=new default_project();
            d1.read();
        }
    }

package assistedPracticeProject;
import java.util.Scanner;
class private_project
{
    private void read()
    {
        Scanner sc=new Scanner(System.in);
        System.out.println("Enter age:");
        int age=sc.nextInt();
        System.out.println("AGE = "+age);
    }
}

public class Practice_Project2_private
{
    public static void main(String args[])
    {
        System.out.println("PRIVATE ACCESS MODIFIER\n");
        private_project d1=new private_project();
        //d1.read(); //error when calling private method of another class
    }
}

```

```

        System.out.println("ERROR-- method not visible");
    }
}

package assistedPracticeProject;
import packages.*;
public class Practice_Project2_protected extends Practice_Project2_packagemethod
{
    public static void main(String args[])
    {
        System.out.println("PROTECTED ACCESS MODIFIER\n");
        Practice_Project2_protected d1=new Practice_Project2_protected();
        d1.read();
    }
}

package assistedPracticeProject;
import packages.*;
public class Practice_Project2_public
{
    public static void main(String args[])
    {
        System.out.println("PUBLIC ACCESS MODIFIER\n");
        Practice_Project2_publicmethod d1=new Practice_Project2_publicmethod();
        d1.read();
    }
}

package packages;

import java.util.Scanner;

```

```
public class Practice_Project2_packagemethod
{
    protected void read()
    {
        Scanner sc=new Scanner(System.in);
        System.out.println("Enter age:");
        int age=sc.nextInt();
        System.out.println("AGE = "+age);
    }
}
```

```
package packages;
```

```
import java.util.Scanner;
```

```
public class Practice_Project2_publicmethod
{
    public void read()
    {
        Scanner sc=new Scanner(System.in);
        System.out.println("Enter age:");
        int age=sc.nextInt();
        System.out.println("AGE = "+age);
    }
}
```

## OUTPUT

### DEFAULT

```
<terminated> Practice_Project2_default [Java Application] C
DEFAULT ACCESS MODIFIER

Enter age:
11
AGE = 11
```

### PRIVATE

```
Problems Javadoc Declaration Search Console Git St
<terminated> Practice_Project2_private [Java Application] C:\Users\HP\.p2\pool\plug
PRIVATE ACCESS MODIFIER

ERROR-- method not visible
```

### PROTECTED

```
Problems Javadoc Declaration Search Console
<terminated> Practice_Project2_protected [Java Application] C:\Users\
PROTECTED ACCESS MODIFIER

Enter age:
77
AGE = 77
```

### PUBLIC

```
Problems Javadoc Declaration Search Console
<terminated> Practice_Project2_public [Java Application] C:\U
PUBLIC ACCESS MODIFIER

Enter age:
12
AGE = 12
```