


Assignment_1 > com > person > J Person.java > { } com.person

```
1 package com.person;
2
3 public class Person {
4
5     // private data member
6     private String name;
7
8     // protected data member
9     protected int age;
10
11     // default (package-private) data member
12     String city;
13
14     // constructor to initialize values
15     public Person(String name, int age, String city) {
16         this.name = name;
17         this.age = age;
18         this.city = city;
19     }
20
21     // public method to display details
22     public void displayPersonDetails() {
23         System.out.println("Name: " + name); // private accessible within class
24         System.out.println("Age: " + age); // protected
25         System.out.println("City: " + city); // default
26     }
27
28     // public getter for private variable
29     public String getName() {
30         return name;
31     }
32 }
33
```

Assignment_1 > com > person > J Student.java > ...

```
1  package com.person;
2
3  public class Student extends Person {
4
5      // private data member
6      private int rollNumber;
7
8      // constructor
9      public Student(String name, int age, String city, int rollNumber) {
10         super(name, age, city);
11         this.rollNumber = rollNumber;
12     }
13
14     // public method to display student details
15     public void displayStudentDetails() {
16
17         // Accessing public method of parent
18         displayPersonDetails();
19
20         // Accessing protected member of parent
21         System.out.println("Age (protected): " + age);
22
23         // Accessing default member of parent (same package)
24         System.out.println("City (default): " + city);
25
26         // Accessing own private member
27         System.out.println("Roll Number: " + rollNumber);
28
29         // ✗ Not allowed:
30         // System.out.println(name); // private member of Person
31     }
32 }
33
```

Assignment_1 > com > test >  MainTest.java > ...

```
1  package com.test;
2
3  import com.person.Student;
4
5  public class MainTest {
6
7      Run | Debug | Run main | Debug main
      public static void main(String[] args) {
8
9          Student s = new Student(name: "Devam", age: 20, city: "Chennai", rollNumber: 101);
10
11          //Allowed: public method
12          s.displayStudentDetails();
13
14          //Not allowed: protected member (different package)
15          //System.out.println(s.age);
16
17          //Not allowed: default member (different package)
18          //System.out.println(s.city);
19
20          //Not allowed: private member
21          //System.out.println(s.name);
22
23          System.out.println(x: "\nAccess restrictions demonstrated successfully.");
24      }
25  }
26
```

EXPLORER

...

Person.java U

Student.java 1, U

MainTest.java 5, U X

Assignment_1 > com > test > MainTest.java > ...

1 package com.test;

2

3 import com.person.Student;

4

5 public class MainTest {

PROBLEMS 6

OUTPUT

DEBUG CONSOLE

TERMINAL

PORTS

pwsh - Assignment_1

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PS E:\Study Material\College Assignment and Practice Codes\CSE4019> cd .\Assignment_1\

PS E:\Study Material\College Assignment and Practice Codes\CSE4019\Assignment_1> javac -d . com/person/*.java c

om/test/*.java

PS E:\Study Material\College Assignment and Practice Codes\CSE4019\Assignment_1> java com.test.MainTest

Name: Devam

Age: 20

City: Chennai

Age (protected): 20

City (default): Chennai

Roll Number: 101

PS E:\Study Material\College Assignment and Practice Codes\CSE4019\Assignment_1>

> OUTLINE

> TIMELINE

> PROJECTS

> RUN CONFIGURATION

> JAVA PROJECTS