

Assignment 1

```
public class Student {  
    private String Sname;  
    private String Cname;  
    private int StudentID;  
    public Student(int id, String sname, String cname) {  
        this.StudentID = id;  
        this.Sname = sname;  
        this.Cname = cname;  
    }  
    public void display(){  
        System.out.println("Student ID: " + this.StudentID);  
        System.out.println("Student Name: " + this.Sname);  
        System.out.println("Course Name: " + this.Cname);  
    }  
    public static void main(String args[]){  
        Student student = new Student(101, "John Doe", "DYPTC");  
        System.out.println("Successful!");  
        student.display();  
    }  
}
```

OUTPUT:

```
PS A:\Microsoft VS Code\New folder> & 'C:\Program Files\Java\jdk-19\bin\javac.exe' 'C:\Users\Rohan\AppData\Roaming\Code\User\workspaceStorage\2\workspace\java\jdt_ws\New folder_166f3bb5\src\Student.java' -cp 'C:\Users\Rohan\AppData\Roaming\Code\User\workspaceStorage\2\workspace\java\jdt_ws\New folder_166f3bb5\bin' 'Student'  
Successful!  
Student ID: 101  
Student Name: John Doe  
Course Name: DYPTC
```

Assignment 2

Before:

```
public class Employee{

    int id;

    int age;

    String name;

    boolean isPermanent;

    public Employee(int id, int age, String name, boolean isPermanent) {

        this.id = id;

        this.age = age;

        this.name = name;

        this.isPermanent = isPermanent;

    }

    public void display() {

        System.out.println("ID: " + id + ", Age: " + age + ", Name: " + name + ", Permanent: " +
isPermanent);

    }

    public static void main(String[] args) {

        int id=1;

        String name="John Doe";

        boolean isPermanent=true;

        int age=30.5;           // compilation error will be occurred.

        Employee emp = new Employee(id, age, name, isPermanent);

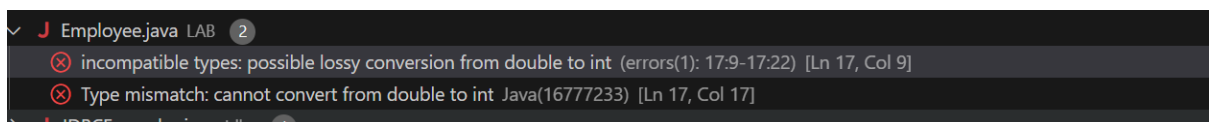
        System.out.println("Successfully Started!");

        emp.display();

    }

}
```

OUTPUT:



AFTER :

```
public class Employee{  
    protected int id;  
    protected int age;  
    protected String name;  
    protected boolean isPermanent;  
    public Employee(int id, int age, String name, boolean isPermanent) {  
        this.id = id;  
        this.age = age;  
        this.name = name;  
        this.isPermanent = isPermanent;  
    }  
    public void display() {  
        System.out.println("ID: " + id + ", Age: " + age + ", Name: " + name + ", Permanent: " +  
isPermanent);  
    }  
    public static void main(String[] args) {  
        int id=1;  
        String name="John Doe";  
        boolean isPermanent=true;  
        int age=(int) 30.5; //compilation error is resolved using narrowing type conversion  
  
        Employee emp = new Employee(id, age, name, isPermanent);  
        System.out.println("Successfully Started!");  
        emp.display();  
    }  
}
```

OUTPUT:

```
PS A:\Microsoft VS Code\New folder> a:; cd 'a:\Microsoft VS Code\New f  
java.exe' '-XX:+ShowCodeDetailsInExceptionMessages' '-cp' 'C:\Users\Roh  
e\d4da3b8820bb4e396c5348882b6e7920\redhat.java\jdt_ws\New folder_166f3b  
Successfully Started!  
ID: 1, Age: 30, Name: John Doe, Permanent: true
```

Assignment 3

```
package com.anudip.learning;

public class Person {

    String name="John Doe";

    int age=30;

    int salary=50000;

    public static void main(String[] args) {

        Person person = new Person();

        System.out.println("Test Successful!");

        System.out.println("Name: " + person.name);

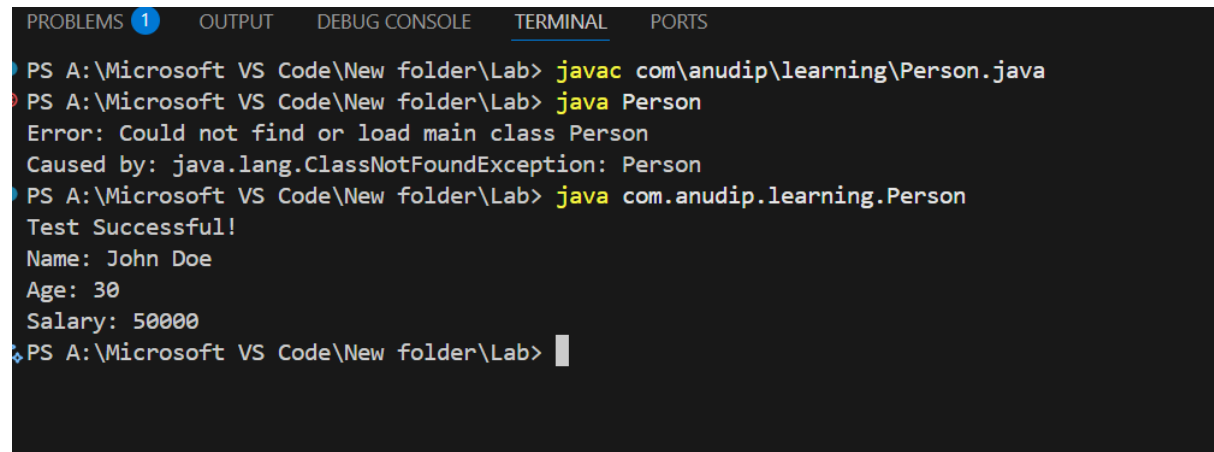
        System.out.println("Age: " + person.age);

        System.out.println("Salary: " + person.salary);

    }

}
```

OUTPUT:



The screenshot shows a VS Code terminal window with the following tabs: PROBLEMS (1), OUTPUT, DEBUG CONSOLE, TERMINAL, and PORTS. The terminal output is as follows:

```
PS A:\Microsoft VS Code\New folder\Lab> javac com\anudip\learning\Person.java
PS A:\Microsoft VS Code\New folder\Lab> java Person
Error: Could not find or load main class Person
Caused by: java.lang.ClassNotFoundException: Person
PS A:\Microsoft VS Code\New folder\Lab> java com.anudip.learning.Person
Test Successful!
Name: John Doe
Age: 30
Salary: 50000
PS A:\Microsoft VS Code\New folder\Lab> 
```