

LAB_ANP_C6339_CLASSES_OBJECTS

Due date: Sunday, 24 October 2023, 5:30 AM

Maximum number of files: 1

Type of work: Individual work

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Assignment-1.

- Create a class Student in Student.java then add member variables studentName, collegeName of type String
- Add a member variable studentID of type int.
- Make all the member variables as private.
- Add a main method. And print a message "Successful".
- Compile the class
- Run the class (Follow Coding convention)

Solution:-

```
public class Student {  
  
    // Private variables to store the student's name, college name, and student ID  
    private String studentName = "Lingabathula Thapaswi"; // Student name  
    private String collegeName = "Kakatiya University College of Engineering and Technology"; // College name  
    private int studentID = 950; // Student ID  
  
  
    // Public static main method to print "Successful" to the console  
    public static void main(String[] args) {  
        System.out.println("Successful");  
    }  
}
```

Output:

```
C:\Users\thila\OneDrive\Desktop\Anudip_Labs>javac Student.java  
  
C:\Users\thila\OneDrive\Desktop\Anudip_Labs>java Student  
Successful
```

Assignment-2.

- Create a new class Employee
- Add member variables: id and age of type int, name of type String and isPermanent of type boolean
- Now assign values 35.5 to age; See the error message.

- How can you avoid this error? Correct the error by casting.
- Make all the members protected
- Add a main method to it. Print message "Successfully started".
- Compile the class.

Solution:-

```
public class Employee {

    protected int id;
    protected String name;
    protected int age;
    protected boolean isPermanent;

    public Employee(int id, String name, int age, boolean isPermanent) {
        this.id = id;
        this.name = name;
        this.age = age;
        this.isPermanent = isPermanent;
    }

    public void printDetails() {
        System.out.println("Employee ID: " + id);
        System.out.println("Employee Name: " + name);
        System.out.println("Employee Age: " + age);
        System.out.println("Employee isPermanent: " + isPermanent);
    }

    public static void main(String[] args) {
        // To avoid the error, cast the value to int before assigning it to the age variable.
        Employee emp = new Employee(1, "Rama", (int) 25.5, true);
        emp.printDetails();

        // Successfully started
        System.out.println("Successfully started");
    }
}
```

```
}
```

```
}
```

Output:

```
C:\Users\thila\OneDrive\Desktop\Anudip_Labs>javac Employee.java
```

```
C:\Users\thila\OneDrive\Desktop\Anudip_Labs>java Employee
```

```
Employee ID: 1
```

```
Employee Name: Rama
```

```
Employee Age: 25
```

```
Employee isPermanent: true
```

```
Successfully started
```
