

```

package programmingIllap;
class StudentInfo {
    long ID;
    String name;
    String major;

    StudentInfo(long id, String nm,
String mjr) {
        ID = id;
        name = nm;
        major = mjr;
    }

    void printStudentInfo() {
        System.out.println("Stu ID : " +
ID + "\nName : " + name + "\nMajor : " +
major);
    }

    class Contact { // inner class
starts here
        String phone;
        String email;
        String postal;

        Contact(String ph, String eml,
String pst) {
            phone = ph;
            email = eml;
            postal = pst;
        }
        public void printContact() {
            System.out.println("Phone : "
+ phone + "\nEmail : " + email +
"\nAddress : " + postal);
        }
    } // end of inner class
} // end of outer class

public class InnerTestApp {
    public static void main(String
args[]) {
        // Single object example
        long id = 2019;
        String nm = "Ahmed";
        String mjr = "SE";
        String ph = "056-1234567";
        String eml =
"ahmed@gmail.com";
        String pst = "Hafr Al Batin";

        System.out.println("\n [
Single object example ] \n");
        StudentInfo obj = new
StudentInfo(id, nm, mjr);
        StudentInfo.Contact in =
obj.new Contact(ph, eml, pst);
        obj.printStudentInfo();
        in.printContact();

        System.out.println("\n [
Array of objects example ] \n");

        StudentInfo[] objAry = new
StudentInfo[2];
        StudentInfo.Contact[] inAry =
new StudentInfo.Contact[2];

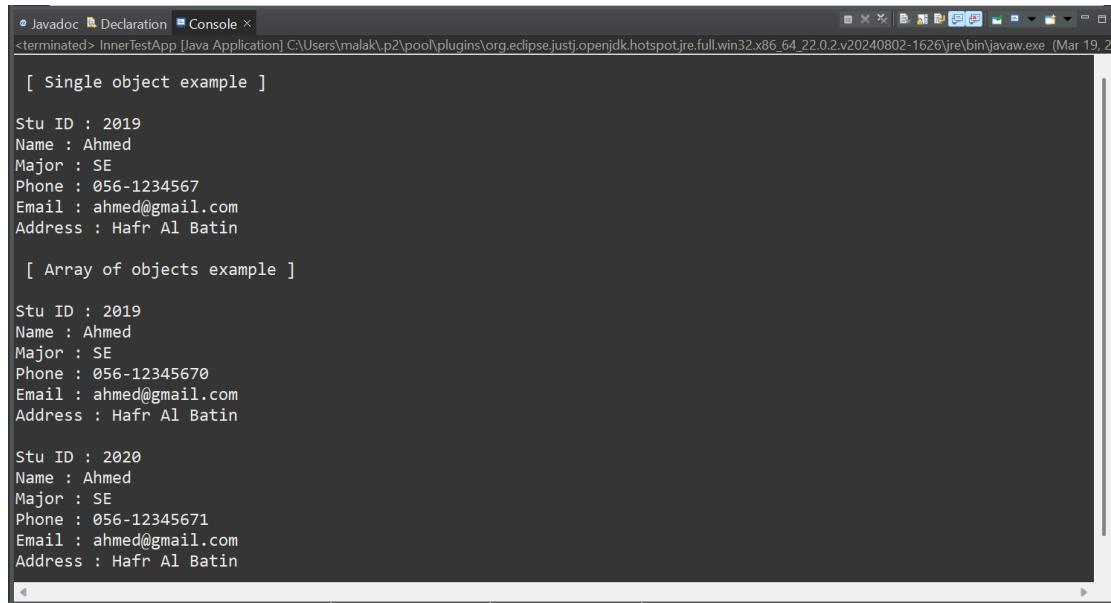
        for (int i = 0; i < 2; i++) {
            // Values can be input
from user and then plugged into
constructors
            objAry[i] = new
StudentInfo(id + i, nm, mjr);
            inAry[i] = objAry[i].new
Contact(ph + i, eml, pst); // if
different
        }

        for (int i = 0; i < 2; i++) {
            // Display the values for two students in
array
            objAry[i].printStudentInfo();
            inAry[i].printContact();
            System.out.println(); //
for new line
        }
    }
}

```

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The screenshot shows a Java IDE window with a console tab. The console output displays two examples of object creation and printing. The first example, '[Single object example]', shows a single student object with ID 2019, Name Ahmed, Major SE, Phone 056-1234567, Email ahmed@gmail.com, and Address Hafr Al Batin. The second example, '[Array of objects example]', shows an array of two student objects. The first object in the array has ID 2019, Name Ahmed, Major SE, Phone 056-12345670, Email ahmed@gmail.com, and Address Hafr Al Batin. The second object in the array has ID 2020, Name Ahmed, Major SE, Phone 056-12345671, Email ahmed@gmail.com, and Address Hafr Al Batin. The IDE window title bar indicates the application is 'InnerTestApp [Java Application]' and the console tab is active.

```
<terminated> InnerTestApp [Java Application] C:\Users\malak\p2\pool\plugins\org.eclipse.justi.openjdk.hotspot.jre.full.win32.x86_64_22.0.2.v20240802-1626\jre\bin\javaw.exe (Mar 19, 2024)

[ Single object example ]

Stu ID : 2019
Name : Ahmed
Major : SE
Phone : 056-1234567
Email : ahmed@gmail.com
Address : Hafr Al Batin

[ Array of objects example ]

Stu ID : 2019
Name : Ahmed
Major : SE
Phone : 056-12345670
Email : ahmed@gmail.com
Address : Hafr Al Batin

Stu ID : 2020
Name : Ahmed
Major : SE
Phone : 056-12345671
Email : ahmed@gmail.com
Address : Hafr Al Batin
```