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**Question Set-ODD**

**Q-Design a super class called Staff with details as StaffId, Name, Phone, Salary. Extend this class by writing three subclasses namely Teaching (domain, publications), Technical (skills), and Contract (period). Construct a program to read and display at least 3 staff objects of all three categories.**

### Code

```
class Staff {
    private int staffId;
    private String name;
    private String phone;
    private double salary;

    public Staff(int staffId, String name, String phone, double salary) {
        this.staffId = staffId;
        this.name = name;
        this.phone = phone;
        this.salary = salary;
    }

    public int getStaffId() {
```

```

        return staffId;
    }

    public String getName() {
        return name;
    }

    public String getPhone() {
        return phone;
    }

    public double getSalary() {
        return salary;
    }
}

class Teaching extends Staff {
    private String domain;
    private String publications;

    public Teaching(int staffId, String name, String phone, double salary,
String domain, String publications) {
        super(staffId, name, phone, salary);
        this.domain = domain;
        this.publications = publications;
    }

    public String getDomain() {
        return domain;
    }

    public String getPublications() {
        return publications;
    }
}

class Technical extends Staff {
    private String skills;

    public Technical(int staffId, String name, String phone, double salary,
String skills) {
        super(staffId, name, phone, salary);
        this.skills = skills;
    }
}

```

```

        public String getSkills() {
            return skills;
        }
    }

    class Contract extends Staff {
        private int period;

        public Contract(int staffId, String name, String phone, double salary,
int period) {
            super(staffId, name, phone, salary);
            this.period = period;
        }

        public int getPeriod() {
            return period;
        }
    }

    public class Main {
        public static void main(String[] args) {
            Staff[] staffList = new Staff[9];

            staffList[0] = new Teaching(101, "John Smith", "123-456-7890", 60000,
"Computer Science", "Introduction to Java Programming");
            staffList[1] = new Teaching(102, "Jane Doe", "234-567-8901", 70000,
"Mathematics", "Calculus II");
            staffList[2] = new Teaching(103, "Bob Johnson", "345-678-9012",
80000, "Physics", "Mechanics");

            staffList[3] = new Technical(201, "Mary Brown", "456-789-0123",
40000, "Database Management");
            staffList[4] = new Technical(202, "Tom Green", "567-890-1234", 50000,
"Networking");
            staffList[5] = new Technical(203, "Karen Lee", "678-901-2345", 60000,
"Web Development");

            staffList[6] = new Contract(301, "James Chen", "789-012-3456", 30000,
1);
            staffList[7] = new Contract(302, "Lisa Kim", "890-123-4567", 40000,
2);
            staffList[8] = new Contract(303, "Chris Lee", "901-234-5678", 50000,
3);

            for (Staff staff : staffList) {

```

```

        System.out.println("Staff ID: " + staff.getStaffId());
        System.out.println("Name: " + staff.getName());
        System.out.println("Phone: " + staff.getPhone());
        System.out.println("Salary: " + staff.getSalary());
        if (staff instanceof Teaching) {
            Teaching teachingStaff = (Teaching) staff;
            System.out.println("Domain: " + teachingStaff.getDomain());
            System.out.println("Publications: " +
teachingStaff.getPublications());
        }

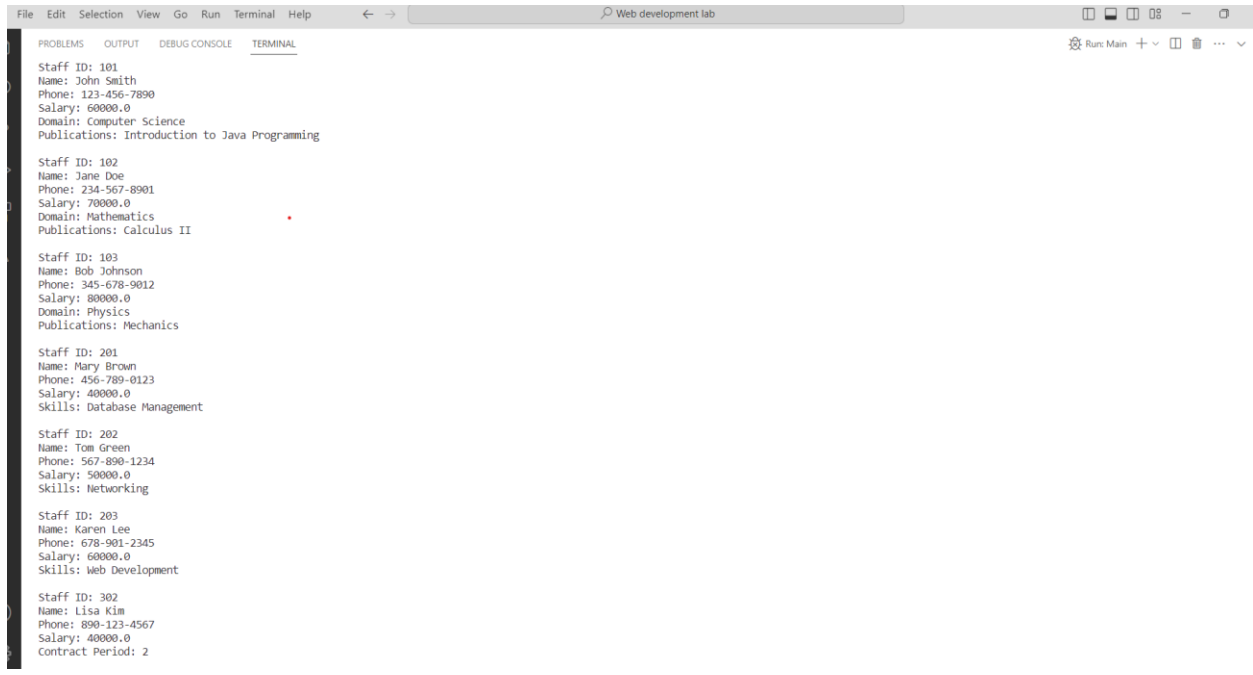
        if (staff instanceof Technical) {
            Technical technicalStaff = (Technical) staff;
            System.out.println("Skills: " + technicalStaff.getSkills());
        }

        if (staff instanceof Contract) {
            Contract contractStaff = (Contract) staff;
            System.out.println("Contract Period: " +
contractStaff.getPeriod());
        }

        System.out.println(); // for spacing
    }
}

```

# Output



The screenshot shows an IDE window titled "Web development lab". The "TERMINAL" tab is active, displaying the following output:

```
Staff ID: 101
Name: John Smith
Phone: 123-456-7890
Salary: 60000.0
Domain: Computer Science
Publications: Introduction to Java Programming

Staff ID: 102
Name: Jane Doe
Phone: 234-567-8901
Salary: 70000.0
Domain: Mathematics
Publications: Calculus II

Staff ID: 103
Name: Bob Johnson
Phone: 345-678-9012
Salary: 80000.0
Domain: Physics
Publications: Mechanics

Staff ID: 201
Name: Mary Brown
Phone: 456-789-0123
Salary: 40000.0
Skills: Database Management

Staff ID: 202
Name: Tom Green
Phone: 567-890-1234
Salary: 50000.0
Skills: Networking

Staff ID: 203
Name: Karen Lee
Phone: 678-901-2345
Salary: 60000.0
Skills: Web Development

Staff ID: 302
Name: Lisa Kim
Phone: 890-123-4567
Salary: 40000.0
Contract Period: 2
```