```
import java.util.Date;
public class App {
  public static void main(String[] args) throws Exception {
    Person person = new Person("Somsak", "1 Chalongkrung Road, Ladkrabang, BKK, 10520",
      "012-345-6789", "somsak@mymail.com");
    person.renderPersonT();
    person.renderPerson();
    System.out.println(person);
    System.out.println();
    Student student = new Student("Somsak", "1 Chalongkrung Road, Ladkrabang, BKK, 10520",
      "012-345-6789", "somsak@mymail.com",1);
    student.renderStudent();
    student.renderPerson();
    System.out.println(student);
    System.out.println();
    Employee employee = new Employee("Somsak", "1 Chalongkrung Road, Ladkrabang, BKK, 10520",
      "012-345-6789", "somsak@mymail.com", "office",25000,new Date());
    employee.renderEmployee();
    employee.renderPerson();
    System.out.println(employee);
    System.out.println();
    Faculty faculty = new Faculty("Somsak", "1 Chalongkrung Road, Ladkrabang, BKK, 10520"
      , "012-345-6789", "somsak@mymail.com", "office", 25000, new Date(), 9, "rank");
    faculty.renderFaculty();
    faculty.renderPerson();
    System.out.println(faculty);
    System.out.println();
    Staff staff = new Staff("Somsak", "1 Chalongkrung Road, Ladkrabang, BKK, 10520",
      "012-345-6789", "somsak@mymail.com", "office",25000,new Date(),"title");
    staff.renderStaff();
    staff.renderPerson();
    System.out.println(staff);
    System.out.println();
 }
}
class Person {
  private String name;
  private String address;
  private String phoneNumber;
  private String emailAddress;
  public Person(String name, String address, String phoneNumber, String emailAddress){
```

```
this.name = name;
  this.address = address;
  this.phoneNumber = phoneNumber;
  this.emailAddress = emailAddress;
}
//setter
public void setName(String name){
  this.name = name;
}
public void setAddress(String address){
  this.address = address;
public void setPhoneNumber(String phoneNumber){
  this.phoneNumber = phoneNumber;
}
public void setEmailAddress(String emailAddress){
  this.emailAddress = emailAddress;
}
//getter
public String getName(){
  return name;
public String getAddress(){
  return address;
}
public String getPhoneNumber(){
  return phoneNumber;
public String getEmailAddress(){
  return emailAddress;
}
public String toString(){
  return "Person{name="+name+", "+
  "address="+address+", "+
  "phoneNumber="+phoneNumber+", "+
  "email="+emailAddress+"}\n";
}
//function
```

```
public void renderPerson(){
    System.out.println("Name: "+name);
    System.out.println("Address: "+address);
    System.out.println("Phone: "+phoneNumber);
    System.out.println("Email: "+emailAddress);
  public void renderPersonT(){
    System.out.println("Person");
  }
}
import java.util.Date;
class Employee extends Person {
        private String office;
        private double salary;
        private Date dateHired;
        public Employee(String name, String address, String phoneNumber, String emailAddress,
                String office, double salary, Date dateHired) {
                super(name, address, phoneNumber, emailAddress);
                this.office = office;
                this.salary = salary;
                this.dateHired =dateHired;
        }
        // getter
        public String getName() {
                 return office;
        }
        public double getSalary() {
                return salary;
        }
        public Date getDateHired() {
                return dateHired;
        }
        public String toString(){
                 return super.toString() +"Employee{office="+office+", "+
                 "salary="+String.format("%.2f",salary)+", "+
                 "dateHired="+dateHired+"}\n";
        }
        //function
```

```
public void renderEmployee(){
    System.out.println("Employee");
  }
}
class Student extends Person {
  private String status;
  public Student(String name, String address, String phoneNumber, String emailAddress,int year) {
    super(name, address, phoneNumber, emailAddress);
    this.status = new String("");
    if(year==1)this.status+=Status.FRESHMAN.getStatus();
    else if(year==2)this.status+=Status.SOPHOMORE.getStatus();
    else if(year==3)this.status+=Status.JUNIOR.getStatus();
    else if(year==4)this.status+=Status.SENIOR.getStatus();
  }
  // getter
  public String getStatus() {
    return status;
  }
  public String toString(){
    return super.toString()+"Student{status="+status+"}";
  }
  //function
  public void renderStudent(){
    System.out.println("Student");
  }
import java.util.Date;
class Faculty extends Employee {
  private int officeHours;
  private String rank;
  public Faculty(String name, String address, String phoneNumber, String emailAddress,
        String office, double salary, Date dateHired,int officeHours, String rank) {
    super(name, address, phoneNumber, emailAddress, office, salary, dateHired);
    this.officeHours = officeHours;
    this.rank = rank;
  }
```

```
// getter
  public int getOfficeHours() {
    return officeHours;
  }
  public String getRank() {
    return rank;
  }
  public String toString(){
        return super.toString() + "Faculty{officeHours="+officeHours+", "+
                 "rank="+rank+"}";
  }
  //function
   public void renderFaculty(){
    System.out.println("Faculty");
  }
import java.util.Date;
class Staff extends Employee {
        private String title;
        public Staff(String name, String address, String phoneNumber, String emailAddress,
                 String office, double salary, Date dateHired,String title) {
                 super(name, address, phoneNumber, emailAddress, office, salary, dateHired);
                 this.title = title;
        }
        // getter
        public String getTitle() {
                 return title;
        }
        public String toString(){
                 return super.toString() + "Staff{title="+title+"}";
        }
        //function
        public void renderStaff(){
    System.out.println("Staff");
  }
}
```

```
enum Status {
        FRESHMAN,
        SOPHOMORE,
       JUNIOR,
       SENIOR;
        public String getStatus() {
               switch (this) {
                       case FRESHMAN:
                              return "FRESHMAN";
                       case SOPHOMORE:
                              return "SOPHOMORE";
                       case JUNIOR:
                              return "JUNIOR";
                       case SENIOR:
                              return "SENIOR";
                       default:
                              return "";
               }
       }
}
```