

```
package ise;
```

```
public interface department {  
    void readdata();  
    void printdata();  
    int print_number_designations(int x);  
    int number_research_consulancy_projs(int x);  
}
```

```
package ise;
```

```
public class faculty {  
    String name , designation , joining_date , subjects_handled ;  
    int age , years_of_experience ;  
}
```

```
package ise;
```

```
import java.util.Scanner;
```

```
public class ISE_department extends faculty implements department {  
    public void readdata() {  
        Scanner sc = new Scanner(System.in);  
        System.out.print("Enter your name : ");  
        name = sc.nextLine();  
        System.out.print("Enter your designation : ");  
        designation = sc.nextLine();  
        System.out.print("Enter your joining date : ");  
        joining_date = sc.nextLine();  
        System.out.print("Input the subjects handled by you : ");  
        subjects_handled = sc.nextLine();  
        System.out.print("Enter your years of Experience : ");  
        years_of_experience = sc.nextInt();  
        System.out.print("Enter your age : ");  
  
        age = sc.nextInt();  
        if(age>58)  
            System.out.println("you are too experience too teach");  
    }  
  
    public void printdata() {  
        System.out.println("-----  
");  
        System.out.println("Name : " + name);  
        System.out.println("Age : " + age);  
        System.out.println("Designation : " + designation);  
        System.out.println("Joining date : " + joining_date);  
        System.out.println("Years of Experience : " +  
years_of_experience);  
    }  
}
```

```

        System.out.println("Subjects handled      : " +
subjects_handled);
        System.out.println("-----
");
    }

    public int print_number_designations(int x) {
        return x;
    }

    public int number_research_consulancy_projs(int y) {
        return y;
    }

    public int experience() {
        return years_of_experience;
    }
}

package ise;
import java.util.Scanner;

public class MainClass {
    public static void main(String[] args) {
        boolean flag = true;
        Scanner sc = new Scanner(System.in);
        System.out.println("Enter the operation to be performed.");
        ISE_department ise[] = new ISE_department[5];
        for(int k = 0 ; k < 5 ; k++ )
            ise[k] = new ISE_department();
        int i = 0;
        while(flag) {
            System.out.print("1.New faculty register \t 2. Display \t
3.Special Display \t 4.Exit : ");
            int ch = sc.nextInt();
            switch(ch) {
                case 1 : ise[i].readdata();
                        i++;
                        break;

                case 2 : System.out.println("Displaying all Faculty
Details.");
                        for(int k = 0 ; k < i ; k++)
                            ise[k].printdata();
                        break;

                case 4 : flag = false;
                        break;

                case 3 : System.out.println("Displaying Faculty
details with year of experience greater than 20.");

```

```
        for(int k=0 ; k<i ; k++) {
            if(ise[k].experience() >= 20)
                ise[k].printdata();
        }
        break;

    default : System.out.println("Invalid input.");
              break;
    }
}
}
```