

2nd program)

```
package labProgram;
```

```
import java.util.*;
```

```
class employee{
```

```
    String name;
```

```
    int eid;
```

```
    String department;
```

```
    int age;
```

```
    String designation;
```

```
    int salary;
```

```
    void input(){
```

```
        Scanner sc=new Scanner(System.in);
```

```
        System.out.println("enter the name ");
```

```
        this.name=sc.nextLine();
```

```
        System.out.println("enter employee id");
```

```
        this.eid=sc.nextInt();
```

```
        sc.nextLine();
```

```
        System.out.println("enter the department");
```

```
        this.department=sc.nextLine();
```

```
        System.out.println("enter the age");
```

```
        this.age=sc.nextInt();
```

```
        sc.nextLine();
```

```
System.out.println("enter the designation");
```

```
this.designation=sc.nextLine();
```

```
System.out.println("enter the salary");
```

```
this.salary=sc.nextInt();
```

```
}
```

```
void display(){
```

```
    System.out.println("Name: "+this.name+" Employee id: "+this.eid+" Department:  
"+this.department+" Age: "+this.age+" Designation: "+this.designation+" Salary: "+ this.salary);
```

```
}
```

```
}
```

```
public class program2 {
```

```
    public static void main(String[] args) {
```

```
        Scanner s=new Scanner(System.in);
```

```
        System.out.println("enter the no. of employee");
```

```
        int n=s.nextInt();
```

```
        employee [] employees=new employee[n];
```

```
        for(int i=0;i<n;i++){
```

```
            employees[i]=new employee();
```

```
            System.out.println("enter the details of employee "+(i+1));
```

```
        employees[i].input();

    }

    System.out.println("-----");

    for(int i=0;i<n;i++){

        System.out.println("the details of employee "+(i+1));
        employees[i].display();

    }

    System.out.println("-----");
    System.out.println("enter the department to calculate all the salary of the employee");
    s.nextLine();
    String dept=s.nextLine();
    int totalSalary=0;
    for(int i=0;i<n;i++){

        if(dept.equalsIgnoreCase(employees[i].department)){
            totalSalary=totalSalary+employees[i].salary;
        }
    }

    System.out.println(totalSalary);

    System.out.println("enter the department to find details of highest paid employee");
    String dept1=s.nextLine();
```

```

int max=Integer.MIN_VALUE;

int j=-1;

for(int i=0;i<n;i++){
    if(dept1.equalsIgnoreCase(employees[i].department)){
        if(employees[i].salary>max){
            max=employees[i].salary;
            j=i;
        }
    }
}

employees[j].display();
}
}

```

3rd program)

```
package labProgram;
```

```
import java.util.*;
```

```

class complex{
    int real,img;

    complex(int real,int img){
        this.real=real;
        this.img=img;
    }
}

```

```

void add(complex c1,complex c2){
    System.out.println("Addition: "+(c1.real+c2.real)+"+"+(c1.img+c2.img)+"i");
}

void subtraction(complex c1,complex c2){
    System.out.println("Addition: "+(c1.real-c2.real)+"+"+(c1.img-c2.img)+"i");
}

void compare(complex c1,complex c2){
    if(c1.real!=c2.real) {
        System.out.println(false);
    }
    else if(c1.img!=c2.img ){
        System.out.println(false);
    }
    else{
        System.out.println(true);
    }
}
}
}

```

```

public class program3 {
    public static void main(String[] args) {
        Scanner sc=new Scanner(System.in);
        System.out.println("enter the real part of complex no. 1");
        int r1=sc.nextInt();
        System.out.println("enter the imaginary part of complex no. 1");
        int img1=sc.nextInt();
        complex c1=new complex(r1, img1);
        System.out.println("enter the real part of complex no. 2");
    }
}

```

```
int r2=sc.nextInt();  
System.out.println("enter the imaginary part of complex no. 2");  
int img2=sc.nextInt();  
complex c2=new complex(r2, img2);  
  
c1.add(c1,c2);  
  
c1.subtraction(c1,c2);  
  
c1.compare(c1,c2);  
}  
  
}
```