Problem-01: Write a Program to test Default Constructor.

```java
1    package MainDefaultConstructor;
2
3    class Person {
4        private int age;
5        private String name;
6
7        public Person() {
8            System.out.println("Default constructor for Person is called.");
9        }
10
11       public void setAge(int age){
12           this.age=age;
13       }
14
15       public void setName(String name) {
16           this.name=name;
17       }
18
19       public int getAge(){
20           return age;
21       }
22
23       public String getName() {
24           return name;
25       }
26   }
27
28   public class Main{
29       public static void main(String[] args) {
30           Person p1 = new Person();
31
32           p1.setName("Mahfuz");
33           System.out.println("The person name:" + p1.getName());
34
35           p1.setAge(23);
36           System.out.println("The person age:"+ p1.getAge());
37       }
38   }
39
```

Output - Lab_5 (run) ✕

```
run:
Default constructor for Person is called.
The person name:Mahfuz
The person age:23
BUILD SUCCESSFUL (total time: 0 seconds)
```

Problem-02: Write a Program to test Parameterize Constructor.

```java
1     package ParameterizeConstructor;
2
3     class Student {
4         private int id;
5         private String dept;
6         public Student(int id){
7             System.out.println("parameterise constructor set a default id:" + id );
8         }
9
10        public void setId(int id){
11            this.id=id;
12        }
13        public int getId(){
14            return id;
15        }
16
17        public void setDept(String dept) {
18            this.dept=dept;
19        }
20        public String getDept() {
21            return dept;
22        }
23
24    }
25
26    public class Main {
27        public static void main(String[] args) {
28            Student s1 = new Student(0);
29
30            s1.setId(241311058);
31            System.out.println("The Student Id:" + s1.getId());
32
33            s1.setDept("CSE");
34            System.out.println("Department:" + s1.getDept());
35
36        }
37    }
```

ParameterizeConstructor.Main > main >

Output - Lab_5 (run) ×

```
run:
parameterise constructor set a default id:0
The Student Id:241311058
Department:CSE
BUILD SUCCESSFUL (total time: 0 seconds)
```

Problem-03: Write a Program to test Encapsulation.

```java
1   package Encapsulation;
2
3   class Employee {
4       private int salari;
5       private String position;
6
7       public void setESalari(int salari){
8           this.salari=salari;
9       }
10      public int getESalai(){
11          return salari;
12      }
13
14      public void setEPosition(String position) {
15          this.position=position;
16      }
17      public String getEPosition() {
18          return position;
19      }
20
21  }
22
23  public class Main {
24      public static void main(String[] args) {
25          Employee E1 = new Employee();
26
27          E1.setEPosition("HR Head");
28          System.out.println("Employee Position: " + E1.getEPosition());
29
30          E1.setESalari(20000);
31          System.out.println("Employee Salari: " + E1.getESalai());
32      }
33  }
34
```

Output - Lab_5 (run) ×

```
run:
Employee Position: HR Head
Employee Salari: 20000
BUILD SUCCESSFUL (total time: 0 seconds)
```