

Tugas Kelas dan Objek II

Praktikum Pemrograman 1

Nama : Muhammad Faris Fathur Rohman

NRP : 223040126

Kelas : B

Link Github : https://github.com/Riss27/PBO_223040126.git

Soal

Setter dan Getter untuk fungsi Lingkaran

```
▼ public class Lingkaran {  
    private int Jari2;  
  
    public Lingkaran(int Jari2){  
        this.Jari2 = Jari2;  
    }  
  
    public int getJari2() {  
        return Jari2;  
    }  
  
    public void setJari2(int Jari2) {  
        this.Jari2 = Jari2;  
    }  
}
```

Latihan 1

```
public class latihan1 {  
    Run | Debug | Codeium: Refactor | Explain | Generate Javadoc  
    public static void main(String[] args) {  
        Lingkaran l1 = new Lingkaran(Jari2:5);  
        Lingkaran l2 = l1;  
  
        System.out.println(l1.getJari2());  
        System.out.println(l2.getJari2());  
  
        l2.setJari2(Jari2:10);  
  
        System.out.println(l1.getJari2());  
        System.out.println(l2.getJari2());  
    }  
}
```

```
5  
5  
10  
10
```

L2 = L1, jadi jika L2 diisi 10 maka L1 juga akan terisi 10

Latihan 2

```
1  ✓ public class latihan2 {  
2  ✓      public static void main(String[] args) {  
3  
4          Lingkaran l1 = new Lingkaran(5);  
5          Lingkaran l2 = l1;  
6          Lingkaran l3 = new Lingkaran(7);  
7  
8          System.out.println(l1.getJari2());  
9          System.out.println(l2.getJari2());  
10         System.out.println(l3.getJari2());  
11  
12         l2 = l3; //l2 terikat dengan l3  
13  
14         System.out.println(l1.getJari2());  
15         System.out.println(l2.getJari2());  
16         System.out.println(l3.getJari2());  
17  
18     }  
19 }
```

```
[Running] cd "d:\UNPAS\SEMESTER 4\PEMROGRAMAN BERORIENTASI OBJEK\PBO_223040126\" && javac latihan2.java && java latihan2  
5  
5  
7  
5  
7  
7
```

Latihan 3

```
1  ✓ public class latihan3 {
2  ✓      public static void main(String[] args) {
3
4          Lingkaran l1 = new Lingkaran(5);
5          Lingkaran l2 = l1;
6          Lingkaran l3 = new Lingkaran(7);
7
8          System.out.println(l1.getJari2());
9          System.out.println(l2.getJari2());
10         System.out.println(l3.getJari2());
11
12         l2 = null;
13
14         System.out.println(l1.getJari2());
15         System.out.println(l2.getJari2());
16         //l2 tidak dapat di print karena nilainya null
17         System.out.println(l3.getJari2());
18
19     }
20 }
```

```
5
5
7
5
Exception in thread "main" java.lang.NullPointerException: Cannot invoke "Lingkaran.getJari2()" because "l2" is null
at latihan3.main(latihan3.java:15)
```

Latihan 4

```
1  ✓ public class latihan4 {
2  ✓      public static void main(String[] args) {
3
4          Lingkaran l1 = new Lingkaran(5);
5          Lingkaran l2 = l1;
6          Lingkaran l3 = new Lingkaran(7);
7
8          System.out.println(l1.getJari2());
9          System.out.println(l2.getJari2());
10         System.out.println(l3.getJari2());
11
12         l2 = null;
13
14         System.out.println(l1.getJari2());
15
16         // Memeriksa apakah l2 tidak null sebelum mencoba mengaksesnya
17         if(l2 != null) {
18             System.out.println(l2.getJari2());
19         }
20         System.out.println(l3.getJari2());
21     }
22 }
```

```
5
5
7
5
7
```

Latihan 5

```
1  ✓ public class latihan5 {
2  ✓     public static void main(String[] args) {
3      Lingkaran l1 = new Lingkaran(5);
4      Lingkaran l2 = l1;
5      Lingkaran l3 = new Lingkaran(7);
6
7      System.out.println(l1.getJari2());
8      System.out.println(l2.getJari2());
9      System.out.println(l3.getJari2());
10
11     // mengosongkan referensi l1, l2, l3
12     l1 = null;
13     l2 = null;
14     l3 = null;
15
16     }
17 }
```

```
5
5
7
```

Setter & Getter untuk fungsi Student

```
1  ✓ public class Student {
2      private int Nrp;
3
4      public Student(int Nrp){
5          this.Nrp = Nrp;
6      }
7
8      public int getNrp() {
9          return Nrp;
10     }
11
12     public void setNrp(int Nrp) {
13         this.Nrp = Nrp;
14     }
15 }
```

Latihan 6

```
1  ✓ public class latihan6 {
2  ✓      public static void main(String[] args) {
3          Student x = new Student(0);
4          Student y = x;
5
6          x.setNrp(01);
7          y.setNrp(02);
8
9          System.out.println(x.getNrp()); //sehingga x disini itu 1
10         Student z = new Student(0);
11
12         z.setNrp(03);
13         x = z; //terikat dengan z
14
15         System.out.println(x.getNrp()); //sehingga x disini itu 3
16         System.out.println(y.getNrp()); //sehingga y disini itu 2
17     }
18 }
```

2
3
2

Latihan 7

```
1  ✓ public class latihan7 {
2  ✓      public static void main(String[] args) {
3          Lingkaran l1 = new Lingkaran(5);
4          Lingkaran l2 = l1;
5
6          System.out.println(l1.getJari2()); //5
7          System.out.println(l2.getJari2()); //5
8
9          ubahJari2(l2); //value l2 diubah dengan fungsi ubahNrp
10
11         System.out.println(l1.getJari2()); //4
12         System.out.println(l2.getJari2()); //4
13     }
14
15     public static void ubahJari2(Lingkaran obj){
16         obj.setJari2(4); //mengubah value jari2 obj
17     }
18 }
19 }
```

5
5
4
4

LatihanStudent

```
1  ✓ public class latihanStudent {
2  ✓      public static void main(String[] args) {
3          Student x = new Student(0);
4          Student y = x;
5
6          x.setNrp(01);
7          y.setNrp(02);
8          System.out.println(x.getNrp());
9          Student z = new Student(0);
10         z.setNrp(03);
11         x = y;
12
13         System.out.println(x.getNrp());
14         System.out.println(y.getNrp());
15     }
16 }
```

0
2
2
2

LingkaranMain

```
1  ✓ public class LingkaranMain {
2  ✓      public static void main(String[] args) {
3          Lingkaran l1 = new Lingkaran(5);
4          Lingkaran l2 = l1;
5          System.out.println(l1.getJari2()); //5
6          System.out.println(l2.getJari2()); //5
7          ubahJari2(l2);
8          System.out.println(l1.getJari2()); //4
9          System.out.println(l2.getJari2()); //4
10     }
11
12     public static void ubahJari2(Lingkaran obj) {
13         obj.setJari2(4);
14     }
15 }
```

5
5
4
4