

Object Oriented Programming

1. Menghitung Luas dan Keliling

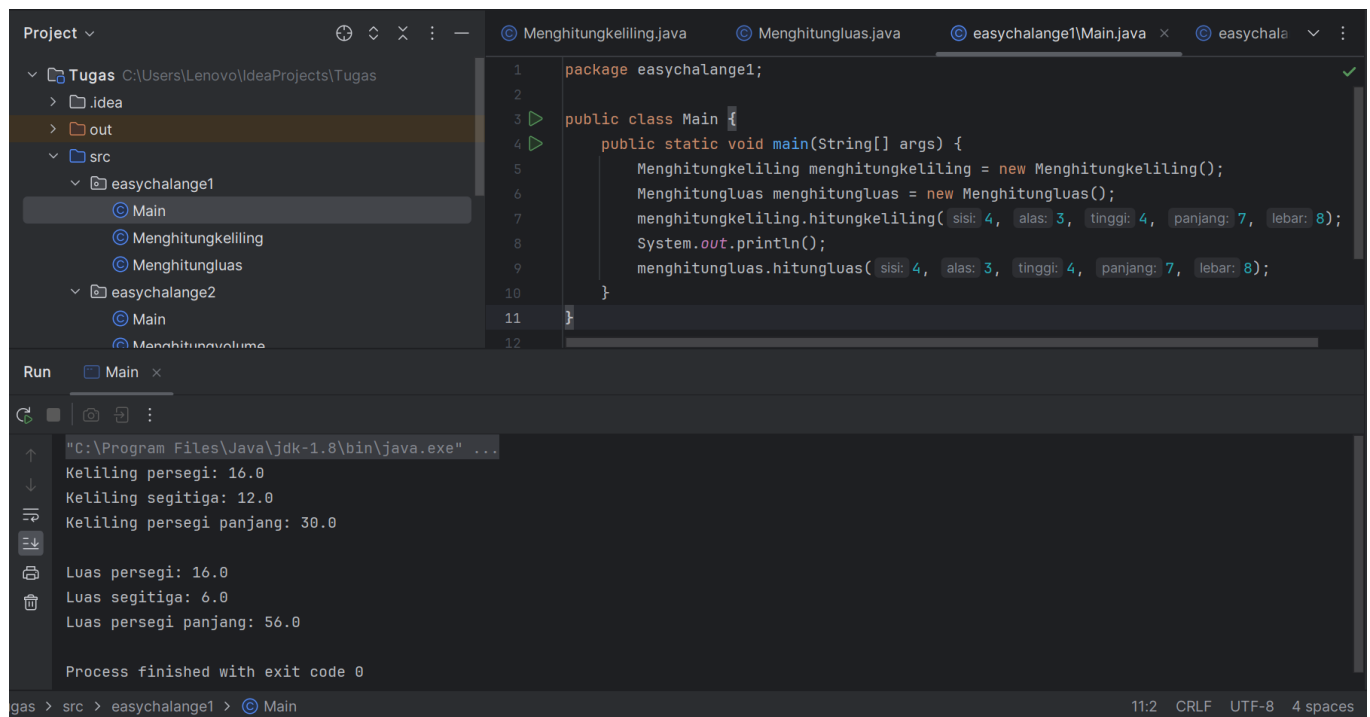
The image displays two screenshots of an IDE, likely IntelliJ IDEA, showing the development of a Java application for calculating area and perimeter. The project structure on the left shows a package named 'easychallenge1' containing classes 'Main', 'Menghitungkeliling', and 'Menghitungluas'. The right pane shows the code for 'Menghitungluas.java' and 'Menghitungkeliling.java'.

Top Screenshot: Menghitungluas.java

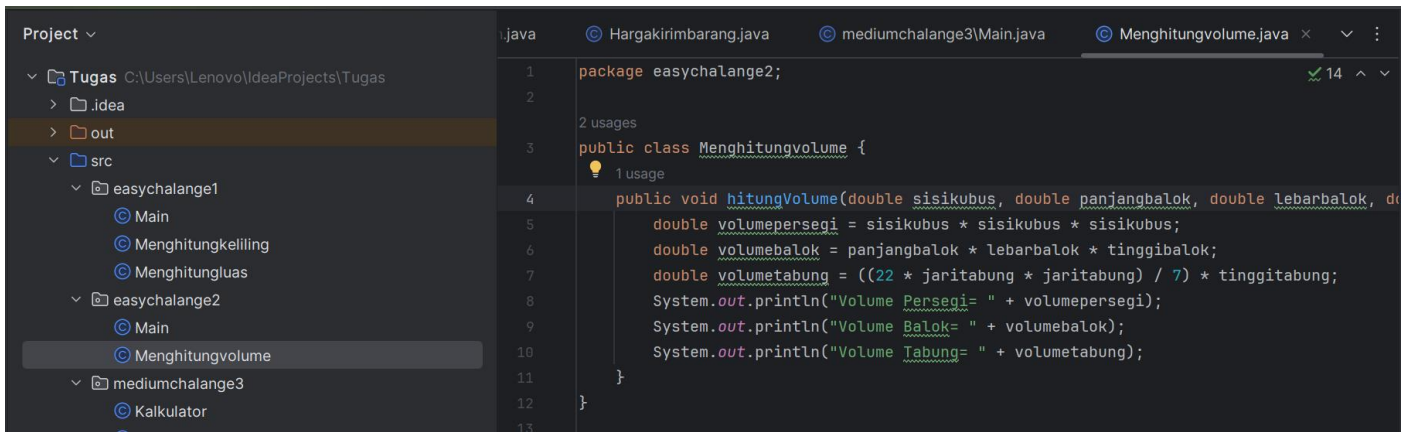
```
1 package easychallenge1;
2
3 public class Menghitungluas {
4     public void hitungluas(double sisi, double alas, double tinggi, double panjang, double lebar) {
5         double luaspersegi = sisi * sisi;
6         double luassegitiga = 0.5 * alas * tinggi;
7         double luaspersegipanjang = panjang * lebar;
8         System.out.println("Luas persegi: " + luaspersegi);
9         System.out.println("Luas segitiga: " + luassegitiga);
10        System.out.println("Luas persegi panjang: " + luaspersegipanjang);
11    }
12 }
13
```

Bottom Screenshot: Menghitungkeliling.java

```
1 package easychallenge1;
2
3 public class Menghitungkeliling {
4     public void hitungkeliling(double sisi, double alas, double tinggi, double panjang, double lebar) {
5         double kelilingpersegi = 4 * sisi;
6         double sisiMiring = Math.sqrt(alas * alas + tinggi * tinggi);
7         double kelilingsegitiga = alas + tinggi + sisiMiring;
8         double kelilingpersegipanjang = 2 * (panjang + lebar);
9         System.out.println("Keliling persegi: " + kelilingpersegi);
10        System.out.println("Keliling segitiga: " + kelilingsegitiga);
11        System.out.println("Keliling persegi panjang: " + kelilingpersegipanjang);
12    }
13 }
14
```

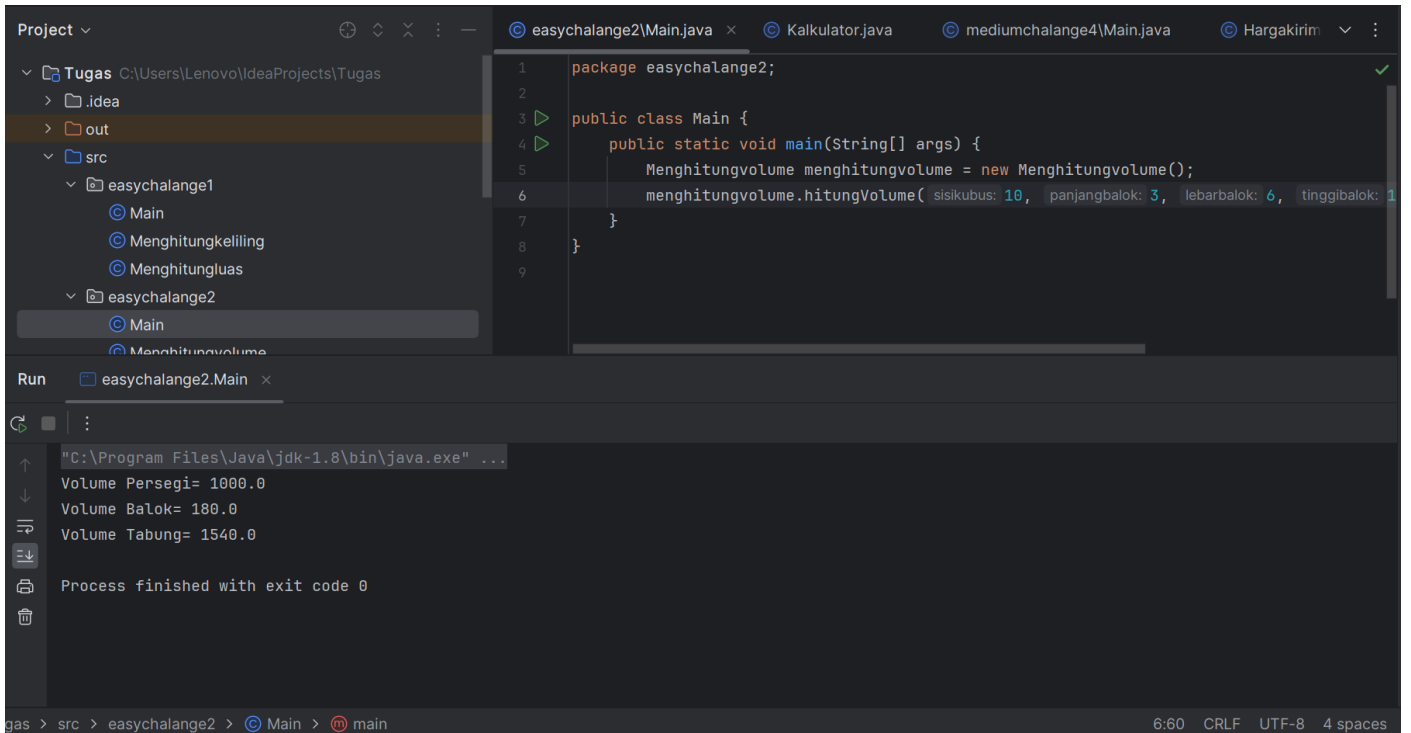


2. Menghitung Volume



The screenshot shows the IntelliJ IDEA interface with the 'MenghitungVolume.java' file open. The code defines a class with a method to calculate the volume of a cube, rectangular prism, and cylinder.

```
1 package easychallenge2;
2
3 public class Menghitungvolume {
4     public void hitungVolume(double sisikubus, double panjangbalok, double lebarbalok, double tinggibalok, double jaritabung, double tinggitabung) {
5         double volumepersegi = sisikubus * sisikubus * sisikubus;
6         double volumebalok = panjangbalok * lebarbalok * tinggibalok;
7         double volumetabung = ((22 * jaritabung * jaritabung) / 7) * tinggitabung;
8         System.out.println("Volume Persegi= " + volumepersegi);
9         System.out.println("Volume Balok= " + volumebalok);
10        System.out.println("Volume Tabung= " + volumetabung);
11    }
12 }
13
```



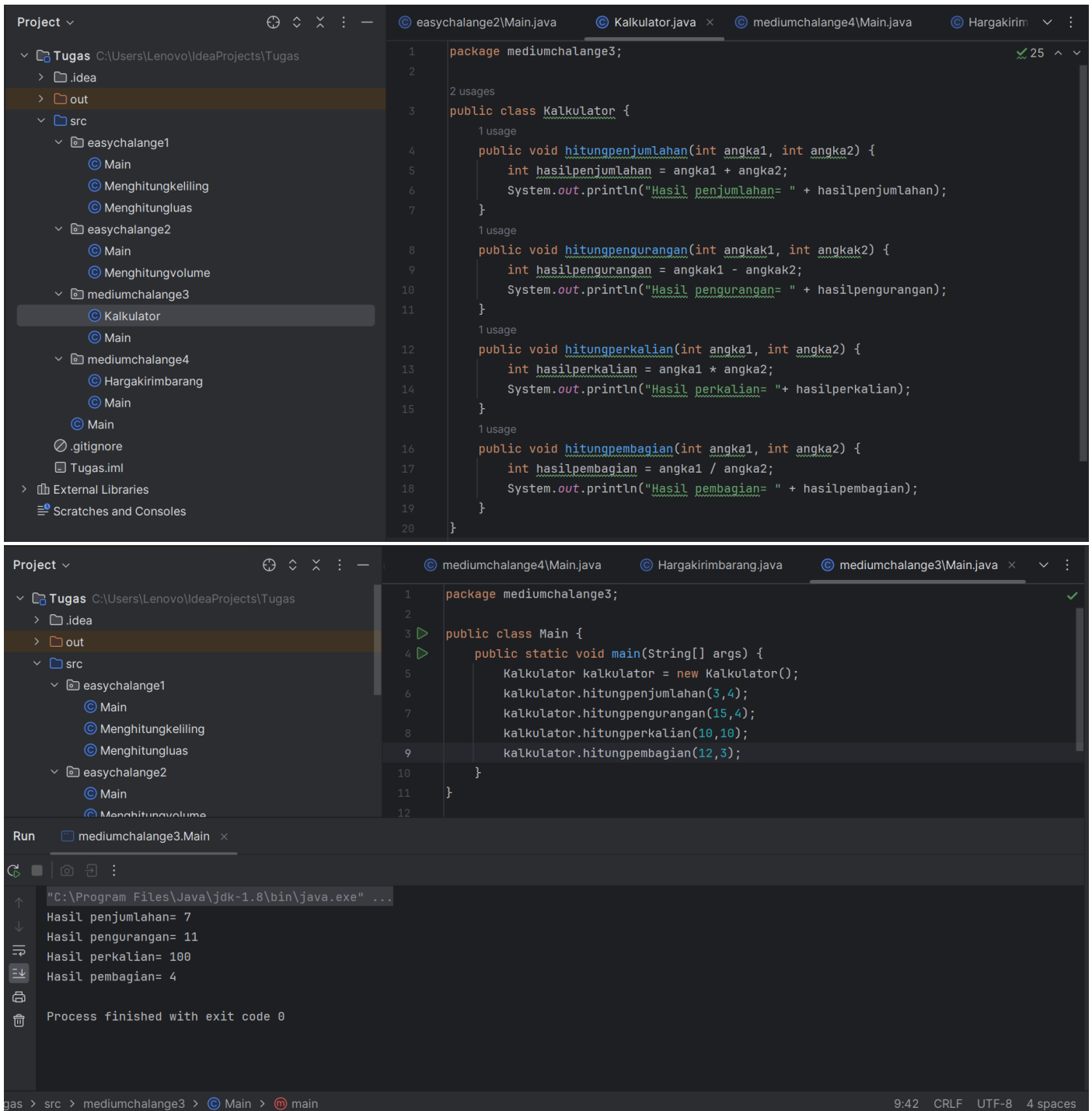
The screenshot shows the IntelliJ IDEA interface with the 'Main.java' file open. The code defines a main method that creates an instance of the 'MenghitungVolume' class and calls the 'hitungVolume' method with specific values.

```
1 package easychallenge2;
2
3 public class Main {
4     public static void main(String[] args) {
5         Menghitungvolume menghitungvolume = new Menghitungvolume();
6         menghitungvolume.hitungVolume( sisikubus: 10, panjangbalok: 3, lebarbalok: 6, tinggibalok: 1, jaritabung: 10, tinggitabung: 10);
7     }
8 }
9
```

The Run window shows the output of the program:

```
"C:\Program Files\Java\jdk-1.8\bin\java.exe" ...
Volume Persegi= 1000.0
Volume Balok= 180.0
Volume Tabung= 1540.0
Process finished with exit code 0
```

3. Kalkulator



The image displays a Java IDE with two panels showing the implementation of a calculator application.

Top Panel: Kalkulator.java

```
1 package mediumchallenge3;
2
3 public class Kalkulator {
4     public void hitungpenjumlahan(int angka1, int angka2) {
5         int hasilpenjumlahan = angka1 + angka2;
6         System.out.println("Hasil penjumlahan= " + hasilpenjumlahan);
7     }
8     public void hitungpengurangan(int angkak1, int angkak2) {
9         int hasilpengurangan = angkak1 - angkak2;
10        System.out.println("Hasil pengurangan= " + hasilpengurangan);
11    }
12    public void hitungperkalian(int angka1, int angka2) {
13        int hasilperkalian = angka1 * angka2;
14        System.out.println("Hasil perkalian= " + hasilperkalian);
15    }
16    public void hitungpembagian(int angka1, int angka2) {
17        int hasilpembagian = angka1 / angka2;
18        System.out.println("Hasil pembagian= " + hasilpembagian);
19    }
20 }
```

Bottom Panel: Main.java

```
1 package mediumchallenge3;
2
3 public class Main {
4     public static void main(String[] args) {
5         Kalkulator kalkulator = new Kalkulator();
6         kalkulator.hitungpenjumlahan(3,4);
7         kalkulator.hitungpengurangan(15,4);
8         kalkulator.hitungperkalian(10,10);
9         kalkulator.hitungpembagian(12,3);
10    }
11 }
```

Run Output:

```
"C:\Program Files\Java\jdk-1.8\bin\java.exe" ...
Hasil penjumlahan= 7
Hasil pengurangan= 11
Hasil perkalian= 100
Hasil pembagian= 4
Process finished with exit code 0
```

gas > src > mediumchallenge3 > Main > main 9:42 CRLF UTF-8 4 spaces

4. Ongkos Kirim

The image shows a screenshot of an IDE with two panels. The top panel displays the source code for a Java class named `Hargakirimbarang`. The bottom panel shows the execution output of a program that uses this class.

Top Panel: Source Code

```
1 package mediumchallenge4;
2
3 public class Hargakirimbarang {
4     public int hitungharga (int panjang, int lebar, int tinggi, int beratbarang) {
5         int volumeminimal = 50;
6         int beratminimal = 1;
7         int hargastandar = 5000;
8         int volume = panjang * lebar * tinggi;
9         if (volume <= volumeminimal && beratbarang <= beratminimal) {
10             return hargastandar;
11         } else {
12             return hargastandar * (volume/50) * beratbarang;
13         }
14     }
15 }
16
```

Bottom Panel: Execution Output

```
Run mediumchallenge4.Main x
"C:\Program Files\Java\jdk-1.8\bin\java.exe" ...
Harga pengiriman barang adalah Rp5000
Harga pengiriman barang adalah Rp100000
Process finished with exit code 0
```