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Kelas : TI-21-PA

Praktikum 1 Lab. Pemrograman Berbasis Objek

1. Latihan01.java

The screenshot shows the Eclipse IDE interface with the project 'Praktikum-01-Runtunan' open. The 'src' folder contains several Java files, with 'Latihan01.java' selected. The code implements methods for temperature conversion between Celsius, Fahrenheit, and Reamur. The 'Console' tab shows the execution results:

```
terminated>Latihan01 () [Java Application] /usr/lib/jvm/java-17-openjdk-amd64/bin/java (Sep 24, 2022, 1:08:10 AM – 1:08:10 AM) [pid: 7353]
Convert Celcius to Farenheit
c = 90
f = 122
Convert Celcius to Reamur
r = 90.0
Covert Celcius to Kelvin
k = 363
```

2. Latihan03.java

The screenshot shows the Eclipse IDE interface with the project 'Praktikum-01-Runtunan' open. The 'src' folder contains several Java files, with 'Latihan03.java' selected. The code defines classes for a cone and a cylinder, each with methods to calculate surface area and volume. The 'Console' tab shows the execution results:

```
terminated>Latihan03 [Java Application] /usr/lib/jvm/java-17-openjdk-amd64/bin/java (Sep 24, 2022, 1:11:26 AM – 1:11:27 AM) [pid: 8163]
Luas Segitiga Kerucut adalah = 254.34
Volume Segitiga Kerucut adalah = 0.0
Luas Tabung adalah = 785.0
Volume Tabung adalah = 1570.0
```

3. Latihan04.java

The screenshot shows the Eclipse IDE interface with the project 'Praktikum-01-Runtunan' open. The 'Latihan04.java' file is selected in the Project Explorer. The code prints a header, reads the number of items bought from the user, calculates the total price, and prints the receipt. The console window shows the program's output, including the receipt table and the calculated total.

```
1* import java.util.Scanner;
2
3 public class Latihan04 {
4
5     public static void main(String[] args) {
6         Scanner input = new Scanner(System.in);
7         LocalDate waktusekarang = LocalDateTime.now();
8         DateTimeFormatter formatWaktu = DateTimeFormatter.ofPattern("dd MMM yyyy (HH:mm)");
9         String waktu = waktusekarang.format(formatWaktu);
10
11         double hargaRoti = 6300;
12         double jumlahBeli;
13         double totalHarga;
14         double diskon;
15         double subTotal;
16
17         System.out.println("===== =====");
18         System.out.println("TOKO SERBAGUNA IBIK");
19         System.out.println("===== \n");
20         System.out.print("Masukkan jumlah produk yang dibeli = ");
21
22         jumlahBeli = input.nextInt();
23         totalHarga = hargaRoti * jumlahBeli;
24
25         System.out.print("\n");
26
27         System.out.println(waktu);
28
29         System.out.println("===== \n");
30     }
31 }
```

Console output:

```
<terminated>Latihan04 [Java Application] /usr/lib/jvm/java-17-openjdk-amd64/bin/java (Sep 24, 2022, 1:12:15 AM - 1:12:19 AM) [pid: 8253]
=====
TOKO SERBAGUNA IBIK
=====
Masukkan jumlah produk yang dibeli = 2
24 Sep 2022 (01:12)
ITEM          QTY        HARGA        TOTAL
=====
ROTI ENAK.    2.0      Rp 6300.0   Rp 12600.0
=====
Diskon: -
Sub Total = Rp 12600.0
```

4. Latihan05.java

The screenshot shows the Eclipse IDE interface with the project 'Praktikum-01-Runtunan' open. The 'Latihan05.java' file is selected in the Project Explorer. The code reads a sentence from the user, prints it back, and then prints the sentence with all lowercase letters converted to uppercase. The console window shows the user input and the program's output.

```
1 import java.util.Scanner;
2
3 public class Latihan05 {
4
5     public static void main(String[] args) {
6         Scanner input = new Scanner(System.in);
7         String kalimat;
8
9         System.out.print("Masukkan sebuah kalimat acak = ");
10        kalimat = input.nextLine();
11
12        System.out.println("\nKalimat dengan huruf kecil = " + kalimat);
13        System.out.println("Kalimat dengan huruf besar = " + kalimat.toUpperCase());
14
15        input.close();
16    }
17
18 }
```

Console output:

```
<terminated>Latihan05 [Java Application] /usr/lib/jvm/java-17-openjdk-amd64/bin/java (Sep 24, 2022, 1:13:00 AM - 1:13:27 AM) [pid: 8318]
Masukkan sebuah kalimat acak = pusing aku
Kalimat dengan huruf kecil = pusing aku
Kalimat dengan huruf besar = PUSING AKU
```

5. Latihan06.java

The screenshot shows the Eclipse IDE interface with the following details:

- Project Explorer:** Shows files in the workspace, including Latihan01.java, Latihan03.java, Latihan04.java, Latihan05.java, Latihan06.java, and Students.java.
- Code Editor:** Displays the code for `Latihan06.java`. The code uses `Scanner` to read input from the user for Usia, Firstname, Lastname, and NPM, then prints them concatenated.
- Console Output:** Shows the terminal output of the application running. It prompts for input and displays the concatenated string "19AdrianAdhari1212310035".

```
1 import java.util.Scanner;
2
3 public class Latihan06 {
4
5     public static void main(String[] args) {
6         Scanner input = new Scanner(System.in);
7         String Usia, Firstname, Lastname, NPM;
8
9         System.out.print("Masukkan Usia \t: ");
10        Usia = input.nextLine();
11
12        System.out.print("Masukkan Firstname \t: ");
13        Firstname = input.nextLine();
14
15        System.out.print("Masukkan Lastname \t: ");
16        Lastname = input.nextLine();
17
18        System.out.print("Masukkan NPM \t: ");
19        NPM = input.nextLine();
20
21        System.out.println(Usia.concat(Firstname).concat(Lastname).concat(NPM));
22
23        input.close();
24    }
25
26 }
```

```
<terminated>-Latihan06 [Java Application] /usr/lib/jvm/java-17-openjdk-amd64/bin/java (Sep 24, 2022, 1:14:10 AM - 1:14:24 AM) [pid: 8380]
Masukkan Usia      : 19
Masukkan Firstname : Adrian
Masukkan Lastname  : Adhari
Masukkan NPM       : 212310035
19AdrianAdhari1212310035
```

6. Latihan07.java

The screenshot shows the Eclipse IDE interface with the following details:

- Project Explorer:** Shows files in the workspace, including Latihan01.java, Latihan03.java, Latihan04.java, Latihan05.java, Latihan06.java, and Latihan07.java.
- Code Editor:** Displays the code for `Latihan07.java`. The code reads a name from the user and prints it in uppercase with all vowels removed.
- Console Output:** Shows the terminal output of the application running. It prompts for input and displays the modified name "AdrxXn AdhxRx".

```
1 import java.util.Scanner;
2
3 public class Latihan07 {
4
5     public static void main(String[] args) {
6         Scanner input = new Scanner(System.in);
7         String nama;
8
9         System.out.print("Masukkan nama \t: ");
10        nama = input.nextLine();
11
12        System.out.println("Nama awal \t: " + nama);
13        System.out.println("Nama format \t: " + nama.replaceAll("[aieuo]", "X"));
14
15        input.close();
16    }
17
18 }
```

```
<terminated>-Latihan07 [Java Application] /usr/lib/jvm/java-17-openjdk-amd64/bin/java (Sep 24, 2022, 1:14:56 AM - 1:15:01 AM) [pid: 8441]
Masukkan nama      : Adrian Adhari
Nama awal        : Adrian Adhari
Nama format      : AdrxXn AdhxRx
```

7. Latihan08.java

The screenshot shows the Eclipse IDE interface with the project 'Praktikum-01-Runtunan' open. The 'Latihan08.java' file is selected in the Project Explorer. The code prompts the user for NPM, name, class, semester, and IPK, then prints them back. The Console tab shows the execution results with sample input and output.

```
1 import java.util.Scanner;
2
3 public class Latihan08 {
4
5     public static void main(String[] args) {
6         int NPM, semester;
7         String namaLengkap, namaKelas;
8         double IPK;
9
10        Scanner inputData = new Scanner(System.in);
11
12        System.out.print("Masukkan NPM : ");
13        NPM = inputData.nextInt();
14
15        inputData.nextLine();
16
17        System.out.print("Masukkan nama lengkap : ");
18        namaLengkap = inputData.nextLine();
19
20        System.out.print("Masukkan nama kelas : ");
21        namaKelas = inputData.nextLine();
22
23        System.out.print("Masukkan semester : ");
24        semester = inputData.nextInt();
25
26        System.out.print("Masukkan IPK : ");
27        IPK = inputData.nextDouble();
28    }
29}
```

```
Masukkan NPM : 212310035
Masukkan nama lengkap : Adrian Adhari
Masukkan nama kelas : TI-21-PA
Masukkan semester : 3
Masukkan IPK : 3.95

NPM : 212310035
Nama Lengkap : Adrian Adhari
Nama Kelas : TI-21-PA
Semester : 3
IPK : 3.95
```

8. Latihan09.java

The screenshot shows the Eclipse IDE interface with the project 'Praktikum-01-Runtunan' open. The 'Latihan09.java' file is selected in the Project Explorer. The code uses a Bio class to handle student data. It prompts for NPM, name, class, semester, and GPA, then prints them back. The Console tab shows the execution results with sample input and output.

```
1 package praktikum01runtunan;
2
3 import praktikum01runtunan.Bio;
4
5 public class Latihan09 {
6
7     public static void main(String[] args) {
8
9         Bio objBio = new Bio();
10        String objClassName = objBio.getClassName();
11
12        System.out.print("Masukkan semester Anda = ");
13        int inSemester = valueInput.nextInt();
14        objSemester = objBio.getSemester(inSemester);
15
16        System.out.print("Masukkan GPA / IPK Anda = ");
17        float inGPA = valueInput.nextFloat();
18        objGPA = objBio.getGPA(inGPA);
19
20        OutputStudents(objNPM, objFullName, objClassName, objSemester, objGPA);
21
22        valueInput.close();
23    }
24
25    void OutputStudents(int val_NPM, String val_FullName, String val_ClassName, int val_Semester, float val_GPA) {
26        System.out.println("NPM : " + val_NPM);
27        System.out.println("Nama Lengkap : " + val_FullName);
28        System.out.println("Kelas : " + val_ClassName);
29        System.out.println("Semester : " + val_Semester);
30        System.out.println("GPA / IPK : " + val_GPA);
31    }
32
33 }
```

```
Masukkan NPM : 212310035
Masukkan nama lengkap Anda = Adrian Adhari
Masukkan kelas Anda = TI-21-PA
Masukkan semester Anda = 3
Masukkan GPA / IPK Anda = 3.95

NPM : 212310035
Nama Lengkap : Adrian Adhari
Kelas : TI-21-PA
Semester : 3
GPA / IPK : 3.95
```

9. Latihan10.java

The screenshot shows the Eclipse IDE interface with the following details:

- Project Explorer:** Shows files in the Praktikum-01-Runtunan project, including Latihan03.java, Latihan04.java, Latihan05.java, Latihan06.java, Latihan07.java, Latihan08.java, Latihan09.java, and Latihan10.java.
- Code Editor:** Displays the Java code for Latihan10.java, which imports java.util.Scanner and prints a welcome message followed by member and purchase details.
- Console Output:** Shows the program's output:

```
=====SELAMAT DATAN DI TOKO SERBA.Guna IBIK=====
SILAHKAN ISI DATA DIRI UNTUK MENJADI MEMBER
Masukkan NPM : 212310035
Masukkan nama lengkap : Adrian Adhari
Masukkan kelas : TI-21-PA
Masukkan semester : 3

=====
TOKO SERBA.Guna IBIK
=====
Masukkan jumlah produk yang dibeli = 2

24 Sep 2022 (01:18)
ITEM QTY HARGA TOTAL
=====
ROTI ENAK. 2.0 Rp 6300.0 Rp 12600.0
-----
Diskon:
Sub Total = Rp 12600.0

=====

MEMBER:
NPM : 212310035
Nama Lengkap : Adrian Adhari
Kelas : TI-21-PA
Semester : 3
```
- Taskbar:** Shows various open applications including Microsoft Word, ArcGIS, and WPS Office.