Tugas Pemrograman Berorientasi Objek



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1. Hasil Run

```
Output - Latihan 10 (Asosiasi) (run) X
  run:
  === Matkul UDINUS ===
1. PBO
  Dosen:
  Nurul Anisa, Abas Setiawan,
  Murid sejumlah 2 mahasiswa =
  Ilham Maulana, Ikromi Latifano,
  2. Web
  Dosen:
  Nurul Anisa, Syaifur Rohman,
  Murid sejumlah 2 mahasiswa =
   Daffa Radhitya, Rizqi Akbar, BUILD SUCCESSFUL (total time: 0 seconds)
```

Student.java

```
* To change this license header, choose License Headers in Project
Properties.
* To change this template file, choose Tools | Templates
* and open the template in the editor.
package latihan.pkg10.Asosiation;
/**
* @author adhim
public class Student {
  // atribute
  private String name;
  private Course[] listCourse = new Course[1000];
  private int countCourse;
  //method
  public Student(String name){
    this.name = name;
    //punya class = inputan
  }
  public String getNameStudent(){
    return name;
  public void takeCourse(Course c){
    listCourse[countCourse] = c;
    countCourse++;
```

```
public Course[] getListCourse(){
  return listCourse;
public int getCountCourse(){
  return countCourse;
public static void main(String[]args){
}
```

Faculty.java

```
* To change this license header, choose License Headers in Project
Properties.
* To change this template file, choose Tools | Templates
* and open the template in the editor.
package latihan.pkg10.Asosiation;
* @author adhim
public class Faculty {
  //atribute
  private String teacher;
  private Course[] listCourse = new Course[3];
  private int countCourse;
  //method
  public Faculty(String teacher){
    this.teacher = teacher;
  public String getNameTeacher(){
    return teacher;
  public void teachCourse(Course c){
    listCourse[countCourse] = c;
    countCourse++;
  public Course[] getListCourse(){
    return listCourse;
  public int getCountCourse(){
    return countCourse;
  public static void main(String[]args){
```

```
}
```

Course.java

```
* To change this license header, choose License Headers in Project
Properties.
* To change this template file, choose Tools | Templates
* and open the template in the editor.
package latihan.pkg10.Asosiation;
/**
* @author adhim
public class Course {
  // atribute
  private String nameCourse;
  private Student[] listStudent = new Student[60];
  private int countStudent;
  private Faculty[] listFaculty = new Faculty[3];
  private int countFaculty;
  //method
  public Course(String nameCourse){
    this.nameCourse = nameCourse;
  public String getNamaCourse(){
    return nameCourse;
  public void addStudent(Student s){
    listStudent[countStudent] = s;
    countStudent++;
  public Student[] getStudent(){
    return listStudent;
  public int getCountStudent(){
    return countStudent;
  public void setFaculty(Faculty f){
    listFaculty[countFaculty] = f;
    countFaculty++;
  public Faculty[] getFaculty(){
    return listFaculty;
  public int getCountFaculty(){
```

```
return countFaculty;
  }
  public void printStudent(){
     for(int i = 0; i < countStudent; i++){
       System.out.print(listStudent[i].getNameStudent() + ", ");
  public void printTeacher(){
     for(int i = 0; i < countFaculty; i++){
       System.out.print(listFaculty[i].getNameTeacher() + ", ");
  }
  public static void main(String[]args){
    Course pbo = new Course("PBO"); //konstruktor nya ada inputan nama
course
    Course web = new Course("Web");
    pbo.setFaculty(new Faculty("Nurul Anisa"));
    pbo.setFaculty(new Faculty("Abas Setiawan"));
    web.setFaculty(new Faculty("Nurul Anisa"));
    web.setFaculty(new Faculty("Syaifur Rohman"));
    //teacher adalah objek dari fakulti
    //set student
    pbo.addStudent(new Student("Ilham Maulana"));
    pbo.addStudent(new Student("Ikromi Latifano"));
    web.addStudent(new Student("Daffa Radhitya"));
     web.addStudent(new Student("Rizqi Akbar"));
    //print
    System.out.println("=== Matkul UDINUS ===");
    System.out.println("1. PBO");
    System.out.println("Dosen:");
    pbo.printTeacher();
    System.out.println("\nMurid sejumlah " + pbo.getCountStudent() + "
mahasiswa = ");
    pbo.printStudent();
    System.out.println("\n2. Web");
    System.out.println("Dosen:");
     web.printTeacher(); // void atau procedur jadi bisa dipanggil langsung
    System.out.println("\nMurid sejumlah " + web.getCountStudent() + "
mahasiswa = ");
    //jika fungsi harus dipanggil di sout atau diletakkan dalam variabel
    web.printStudent();
  }
```