

Topics: Array of objects (cont'd), review, method overloading

Reading (JV): review Sec 4.5

Example on array of objects

Please refer to last lecture's handout (Lecture 22, 4/11).

Person class revisited

Modify **Person** class to store data about a **Person**'s best friend: add another instance variable **friend**. What should be the type of the field **friend**? Add two methods **makeFriend** and **beFriendOf** for assigning values to the field friend.

Method overloading

- Different methods can have the same name
- The signature of a method is the *method's name* and the *parameter types* (including the order of the parameters)
- In a class, all methods must have different signatures
- E.g., the **abs** method in the **Math** class
- E.g., overload the constructor in class **Person**

```
/* Organize data for any Person:  name, age */
public class Person {
    private String name;
    private int age;
    private Person friend;

    // Constructors
    public Person(String n, int a) {
        name = n;  age = a;
    }

    public Person(String n, int a, Person f) {
        name = n;  age = a;  friend = f;
    }

    public Person() {}

    // Make a friend

    // Become a friend

    // Determine if self is an adult
    public boolean isAdult() {
        final int mature = 18;
        return age >= mature;
    }

    // Show object data
    public String toString() {
        return name + " is " + age;
    }
} // class Person
```