

Parallel Arrays

zyBook Chap 7.5

Parallel Arrays

Parallel arrays are arrays of the **same size** that are used to store **related lists of items**. For example,

- Array for zip codes, `zipCodes`
- Array for the delivery time for a given zip code, `deliveryTimes`
- If `userZipCode` is at `zipCodes[1]`. Then the delivery time for `userZipCode` can be found at `deliveryTimes[1]`

```
import java.util.Scanner;
```

```
public class DeliveryTime {
```

```
    // Parallel arrays
```

```
    public static final int[] zipCodes = { 37201, 37203, 37205, 37212, 37215 };
```

```
    public static final int[] deliveryTimes = { 20, 15, 20, 20, 15 };
```

```
    public static void main (String[] args) {
```

```
        Scanner scnr = new Scanner(System.in);
```

```
        System.out.print("Zipcode: ");
```

```
        if (scnr.hasNextInt()) {
```

```
            int userZipCode = scnr.nextInt();
```

```
            boolean found = false;
```

```
            for (int i = 0; i < zipCodes.length && !found; ++i) {
```

```
                if (userZipCode == zipCodes[i]) {
```

```
                    found = true;
```

```
                    System.out.println("Delivery time: " + deliveryTimes[i] + " min.");
```

```
                }
```

```
            }
```

```
            if (!found) {
```

```
                System.out.println("Sorry, no delivery to that zip code.");
```

```
            }
```

```
        } else {
```

```
            scnr.next();
```

```
            System.out.println("Invalid zip code.");
```

```
        }
```

```
    }
```

```
}
```

```
$ java DeliveryTime
```

```
Zipcode: 37203
```

```
Delivery time: 15 min.
```

```
$ java DeliveryTime
```

```
Zipcode: 37202
```

```
Sorry, no delivery to that zip code.
```

```
$ java DeliveryTime
```

```
Zipcode: vandy
```

```
Invalid zip code.
```