

```
interface LibraryUser {  
  
    void registerAccount();  
  
    void requestBook();  
  
}
```

```
class KidUser implements LibraryUser {  
  
    int age;  
  
    String bookType;  
  
    public KidUser(int age, String bookType) {  
  
        this.age = age;  
  
        this.bookType = bookType;  
  
    }
```

```
@Override
```

```
public void registerAccount() {  
  
    if (age < 12) {  
  
        System.out.println("You have successfully registered under a Kids Account.");  
  
    } else {  
  
        System.out.println("Sorry, Age must be less than 12 to register as a kid.");  
  
    }  
  
}
```

```
@Override
```

```
public void requestBook() {  
  
    if (bookType.equalsIgnoreCase("Kids")) {
```

```
        System.out.println("Book Issued successfully, please return the book within 10 days.");
    } else {
        System.out.println("Oops, you are allowed to take only kids books.");
    }
}
}
```

```
class AdultUser implements LibraryUser {
    int age;
    String bookType;

    public AdultUser(int age, String bookType) {
        this.age = age;
        this.bookType = bookType;
    }
}
```

```
@Override
public void registerAccount() {
    if (age > 12) {
        System.out.println("You have successfully registered under an Adult Account.");
    } else {
        System.out.println("Sorry, Age must be greater than 12 to register as an adult.");
    }
}
```

```
@Override
public void requestBook() {
```

```

        if (bookType.equalsIgnoreCase("Fiction")) {

            System.out.println("Book Issued successfully, please return the book within 7 days.");

        } else {

            System.out.println("Oops, you are allowed to take only adult Fiction books.");

        }

    }

}

```

```

public class LibraryInterfaceDemo {

    public static void main(String[] args) {

        // Test case #1: KidUser

        KidUser kid1 = new KidUser(10, "Kids");

        kid1.registerAccount(); // Expected output: "You have successfully registered under a Kids
Account."

        kid1.requestBook();    // Expected output: "Book Issued successfully, please return the book
within 10 days."

        KidUser kid2 = new KidUser(18, "Fiction");

        kid2.registerAccount(); // Expected output: "Sorry, Age must be less than 12 to register as a
kid."

        kid2.requestBook();    // Expected output: "Oops, you are allowed to take only kids books."

        // Test case #2: AdultUser

        AdultUser adult1 = new AdultUser(5, "Kids");

        adult1.registerAccount(); // Expected output: "Sorry, Age must be greater than 12 to register as
an adult."

        adult1.requestBook();    // Expected output: "Oops, you are allowed to take only adult Fiction
books."
    }

}

```

```
AdultUser adult2 = new AdultUser(23, "Fiction");

adult2.registerAccount(); // Expected output: "You have successfully registered under an Adult
Account."

adult2.requestBook();    // Expected output: "Book Issued successfully, please return the book
within 7 days."

    }

}
```