

# The Setup

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In this example, **I'll be using HashSets as fields**, and I'll use the **Scanner** class, which I've used many times before, always passing `System.in` to the constructor.

**I'll be using Scanner with just a String passed to the constructor.**

It works similarly. If you want to see this in action, be sure to follow along.

Eventually I'll cover reading input from files, although this code won't be doing that.

Using scanner this way, gives you a taste for a way to do this.

Again the purpose of having a separate video here, to set up a bit of code, is to keep the new topic material more on point later.

# The Setup Challenge - The Contact Class

This last constructor should do the following:

- Add the email argument to the emails set, if email is not null.
- Transform the phone argument, a long, (if it's not zero), to a string in the format (123) 456-7890, for example.
- Add the transformed phone to the phones set.

Finally, include a method called `mergeContactData`, that takes a contact, and returns a **new Contact instance**, which merges the current instance with the Contact passed.

## Contact

Phone Format:  
(nnn) nnn-nnnn

### Fields:

```
String name;  
Set<String> emails = new HashSet<>();  
Set<String> phones = new HashSet<>();
```

### Constructors:

```
Contact(String name)  
Contact(String name, String email)  
Contact(String name, long phone)  
Contact(String name, String email, long  
phone)
```

### Methods:

```
String getName()  
String toString()  
Contact mergeContactData(Contact contact)
```

# The Setup Challenge - The Data (ContactData class)

The ContactData class is going to emulate getting data from an external source, but instead of an external source, I just want you to set this data up with two different text blocks, in the format shown on this slide.

This data purposely has duplicates.

Phone Data	Email Data
Charlie Brown, 3334445555	Mickey Mouse, mckmouse@gmail.com
Maid Marion, 1234567890	Mickey Mouse, micky1@aws.com
Mickey Mouse, 9998887777	Minnie Mouse, minnie@verizon.net
Mickey Mouse, 1247489758	Robin Hood, rhood@gmail.com
Minnie Mouse, 4567805666	Linus Van Pelt, lvpelt2015@gmail.com
Robin Hood, 5647893000	Daffy Duck, daffy@google.com
Robin Hood, 7899028222	
Lucy Van Pelt, 5642086852	
Mickey Mouse, 9998887777	



# The Setup Challenge - The Data (ContactData class)

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**Create a Method named `getData`, that takes a String type** (either “phone” or “email”), and **returns a List of Contact.**

Now, I'm going to use Scanner to parse the data in these text blocks.

You're welcome to try another approach.

**Don't worry, you won't be missing any content I haven't already covered or won't cover shortly.**