

# Shipment Parsing

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## What you'll be building

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The goal of this homework is to create a utility class that contains some methods to display and find shipment information sent to us by our logistic provider.

We periodically receive notifications from our logistics provider telling us when shipments has been shipped. A shipment has the following properties:

- Shipment number
- Order number
- Date when the shipment was shipped
- First name of the customer
- Last name of the customer
- Parent shipment number

An order can have multiple shipments so the provider sends the order number with each new shipment. A parent shipment number is only present when the shipment is an exchange. When an exchange is shipped, the provider sends us a parent shipment number (which is the number of the shipment being exchanged) and omits the order number.

The data is received as a single string where each shipment property is separated by a comma and each shipment is separated by a newline character.

Use the following example string while working through all of the questions in the exercise:

```
SH348503,0567843,2018-12-10 15:08:58 -0000,Jane,Smith,  
SH465980,0936726,2018-12-11 06:08:14 -0000,John,Reynolds,  
SH465994,0936726,2018-12-11 06:12:37 -0000,John,Reynolds,  
SH867263,0234934,2018-12-11 18:28:51 -0000,Rebecca,Jones,  
SH907346,,2018-12-12 21:12:28 -0000,Rebecca,Jones,SH867263  
SH927813,,2018-12-15 09:49:35 -0000,Rebecca,Jones,SH907346
```

You can use whatever programming language you're most comfortable with to implement the solution.

## Requirements

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1. Create a class containing a method that prints out all of the shipments to the standard output. The expected output should look like the following:

```
Shipment #1:
Number: SH348503, Order Number: 0567843, Shipped: 2018-12-10 15:08:58 -0000, First Name
: Jane, Last Name: Smith, Parent Shipment: N/A

Shipment #2:
Number: SH465980, Order Number: 0936726, Shipped: 2018-12-11 06:08:14 -0000, First Name
: John, Last Name: Reynolds, Parent Shipment: N/A

Shipment #3:
Number: SH465994, Order Number: 0936726, Shipped: 2018-12-11 06:12:37 -0000, First Name
: John, Last Name: Reynolds, Parent Shipment: N/A

Shipment #4:
Number: SH867263, Order Number: 0234934, Shipped: 2018-12-11 18:28:51 -0000, First Name
: Rebecca, Last Name: Jones, Parent Shipment: N/A

Shipment #5:
Number: SH907346, Order Number: N/A, Shipped: 2018-12-12 21:12:28 -0000, First Name: Re
becca, Last Name: Jones, Parent Shipment: SH867263

Shipment #6:
Number: SH927813, Order Number: N/A, Shipped: 2018-12-15 09:49:35 -0000, First Name: Re
becca, Last Name: Jones, Parent Shipment: SH907346
```

2. Create a method on the class that takes a shipment number as an argument and returns all of the shipment's properties. How the shipment information is returned is up to you.
3. Create a method on the class that takes a shipment number as an argument and returns all of the shipment's properties and two additional computed properties:
  - Full name: The format for the customer's full name is first name, a space followed by the last name (e.g. Jane Smith)
  - Days ago shipped: Number of days between when the shipment was shipped and the current date
4. Create a method on the class that takes an order number as an argument and returns the properties for all of the associated shipments. The return value should include all of the properties from requirement 3.

## Deliverables

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The deliverable for this homework is the source code of the utility class. Please share the source code either via a public repository on a code sharing platform (e.g. Github or Bitbucket) or provide a zip file containing the code.

Please provide a README file with the how to run your utility in the command line and any other considerations you'd like to include.

## Expected duration

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Please take up to two hours to work on the requirements above and note any requirements you weren't able to complete in the README.