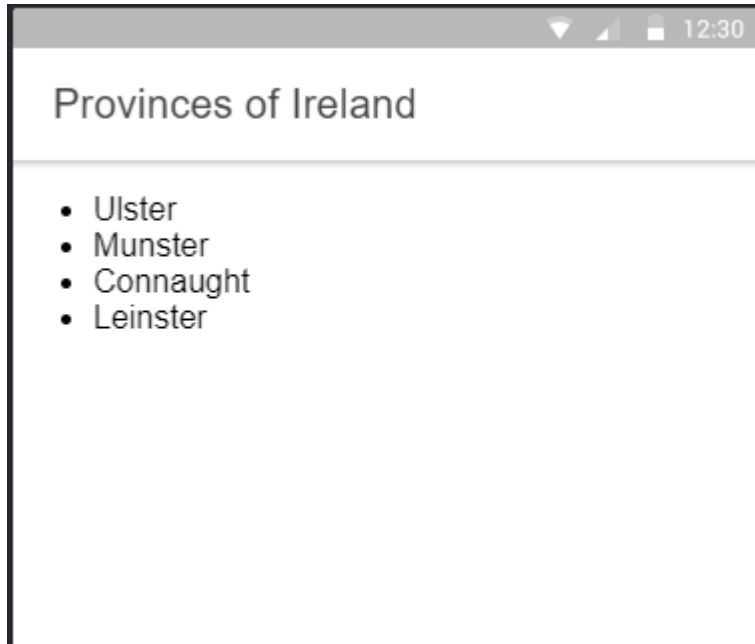The following exercises are related to the use of Augular Observables.

1. Create a git repository for your answers to this problem sheet. Push the repository to GitHub. Make a commit and push it to GitHub after each exercise.

2. (a) Write an Ionic application that displays the list of provinces of Ireland:

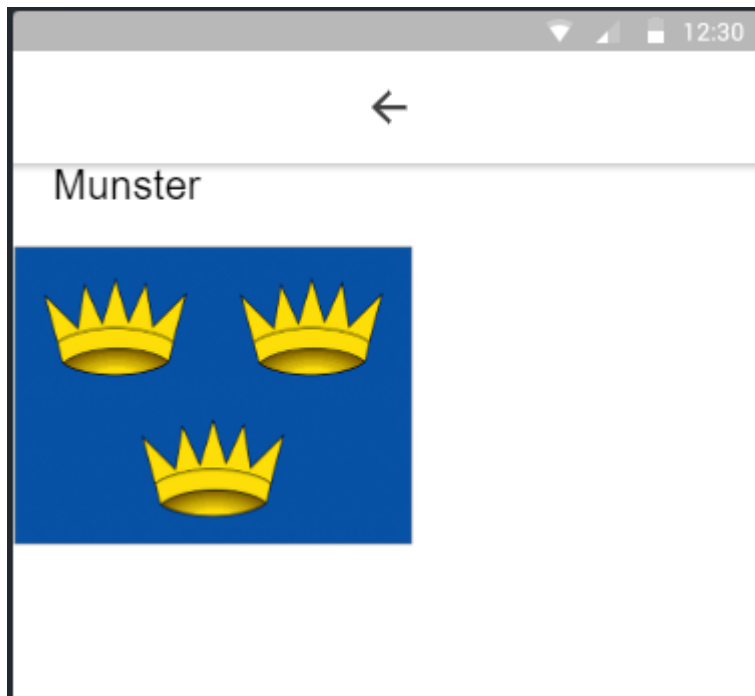These can be hardcoded in the home page (src/app/home/home.page.html) as an ordered list.

(b) When Ulster is clicked a page called UlsterPage should be displayed as follows:

The image can be taken from:

`https://upload.wikimedia.org/wikipedia/commons/7/7e/Flag_of_Ulster.svg`

(c) When Munster is clicked a page called MunsterPage should be displayed as follows:
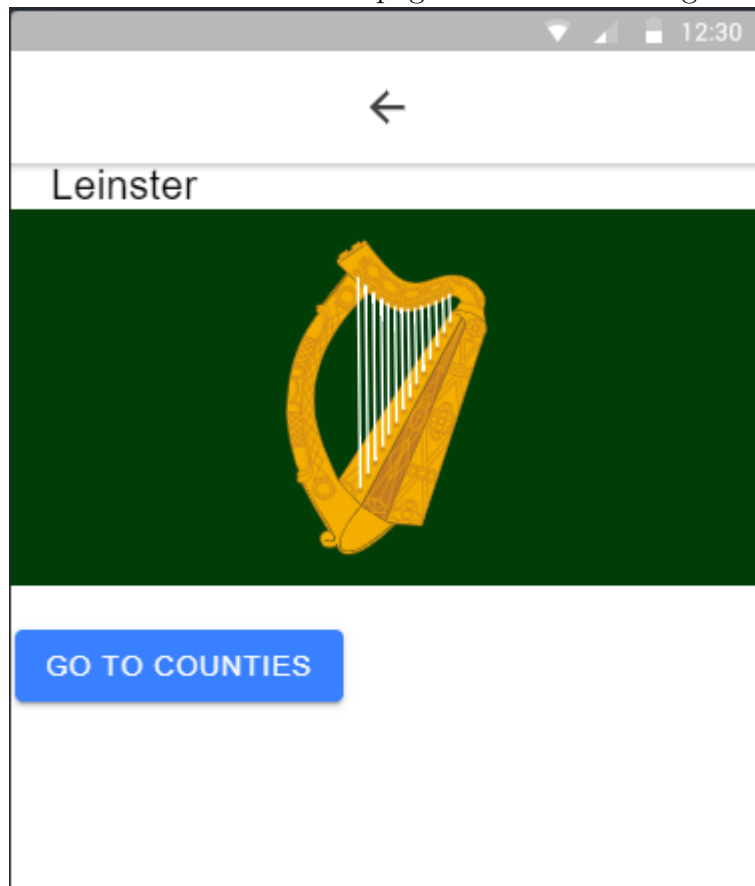
The image can be taken from:
`http://cdn2.bigcommerce.com/server4100/fbaa7/images/stencil/1024x1024/`
`products/143/234/MunsterFlag__26591.1321815062.gif?c=2`

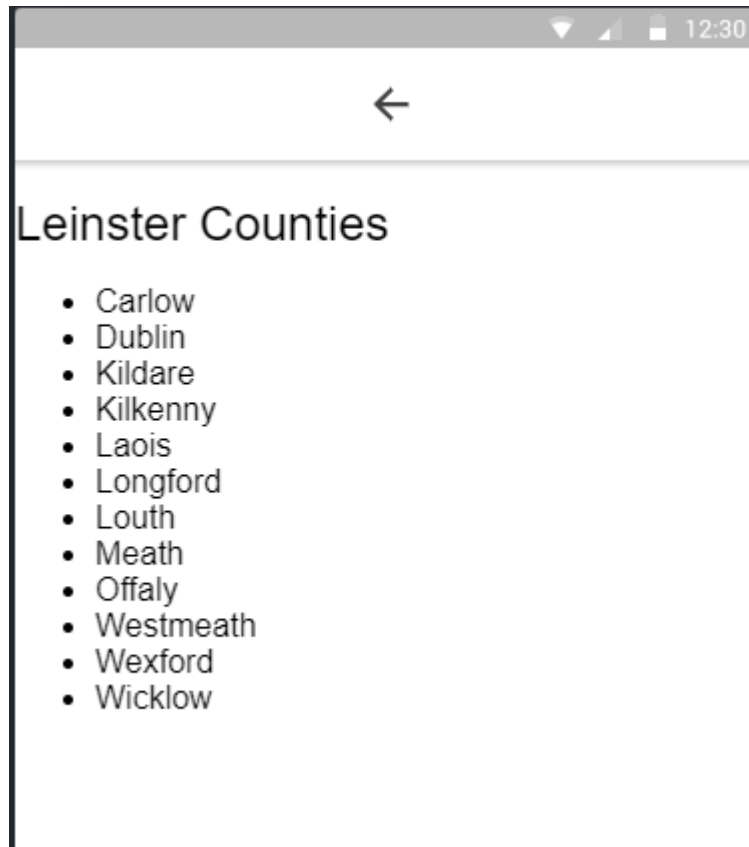(d) When Connaught is clicked a page called ConnaughtPage should be displayed as follows:

- The image can be taken from:
  `https://upload.wikimedia.org/wikipedia/commons/thumb/e/e1/Flag_of_`
  `Connacht.svg/300px-Flag_of_Connacht.svg.png`
- A separate page ConnaughtCountiesPage is displayed at the bottom of the ConnaughtPage.
- This page is consists of a h2 element (Counties in Connaught) and an unordered list element with the 5 counties of Connaught hard-coded.
- When the ConnaughtPage is opened, the ConnaughtCountiesPage is displayed using it's selector

(e) When Leinster is clicked a page called LeinsterPage should be displayed as follows:

- The image can be taken from:
  `https://upload.wikimedia.org/wikipedia/commons/8/8d/Flag_of_Leinster.svg`
- When the Go To Counties button is pressed a new page called LeinsterCounties is shown.

(f) The Leinster Counties page should look as follows

- The list of Leinster Counties should be stored in an array, and a Structural directive should be used to display the array.

- `counties: string[] = ["Carlow", "Dublin", "Kildare", "Kilkenny", "Laois", "Longford", "Louth", "Meath", "Offaly", "Westmeath", "Wexford", "Wicklow"];`

- Create the Ionic application with the following command:
  ionic start ex8p1 blank

- Use the ion-img (`https://ionicframework.com/docs/api/components/img/Img/`) component to display an image.

- Image sizes are as follows width="200" height="150"