

Mini Project-1

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28/10/2021

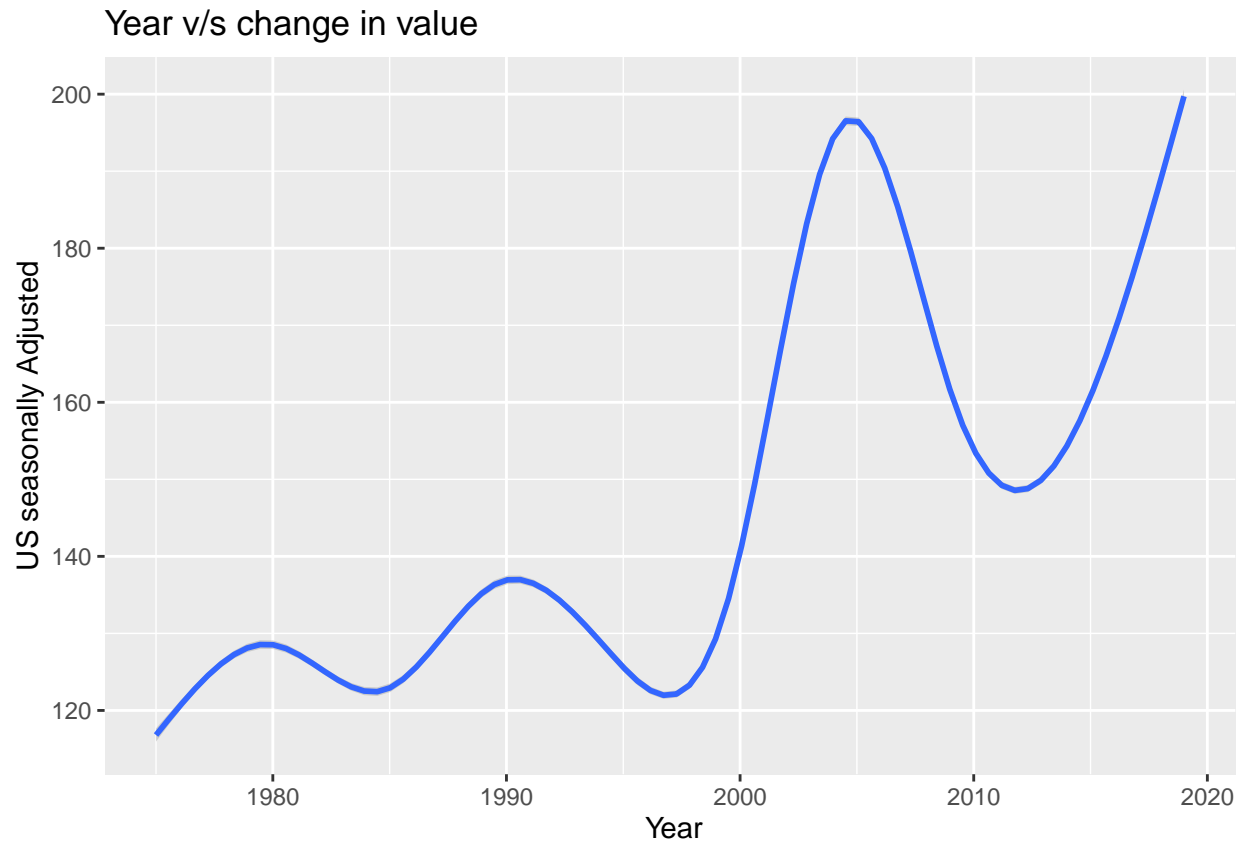
Questions

The researcher's major research question is: How have house prices in U.S. states changed over the last few decades, and are changes in prices are related to population in some way? This question may be difficult to answer, at least straight away. So she has brainstormed a series of questions he would like you to address, which can be divided into groups:

Question 1:

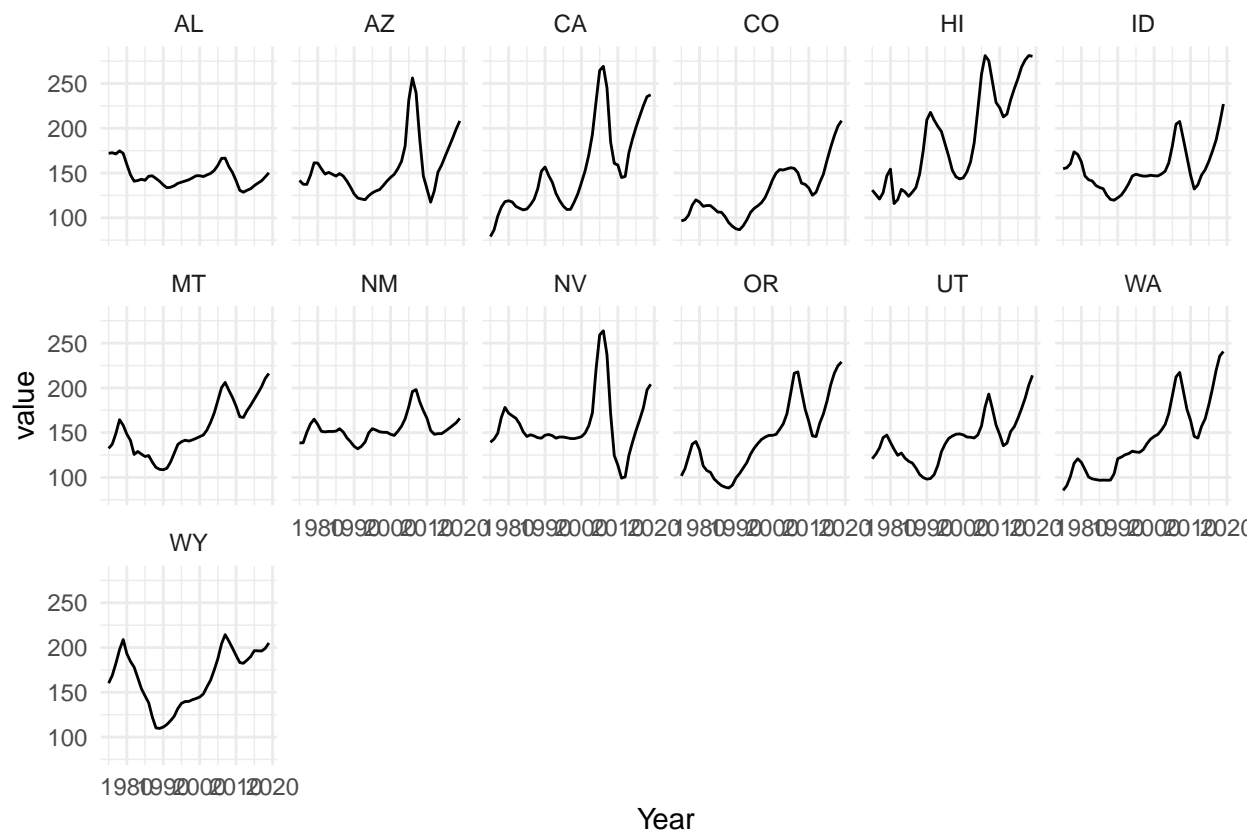
1. House prices over time:
 - a. How have house prices in the U.S changed since 1975, after adjusting for inflation (i.e. relative to the CPI?)

Load the data

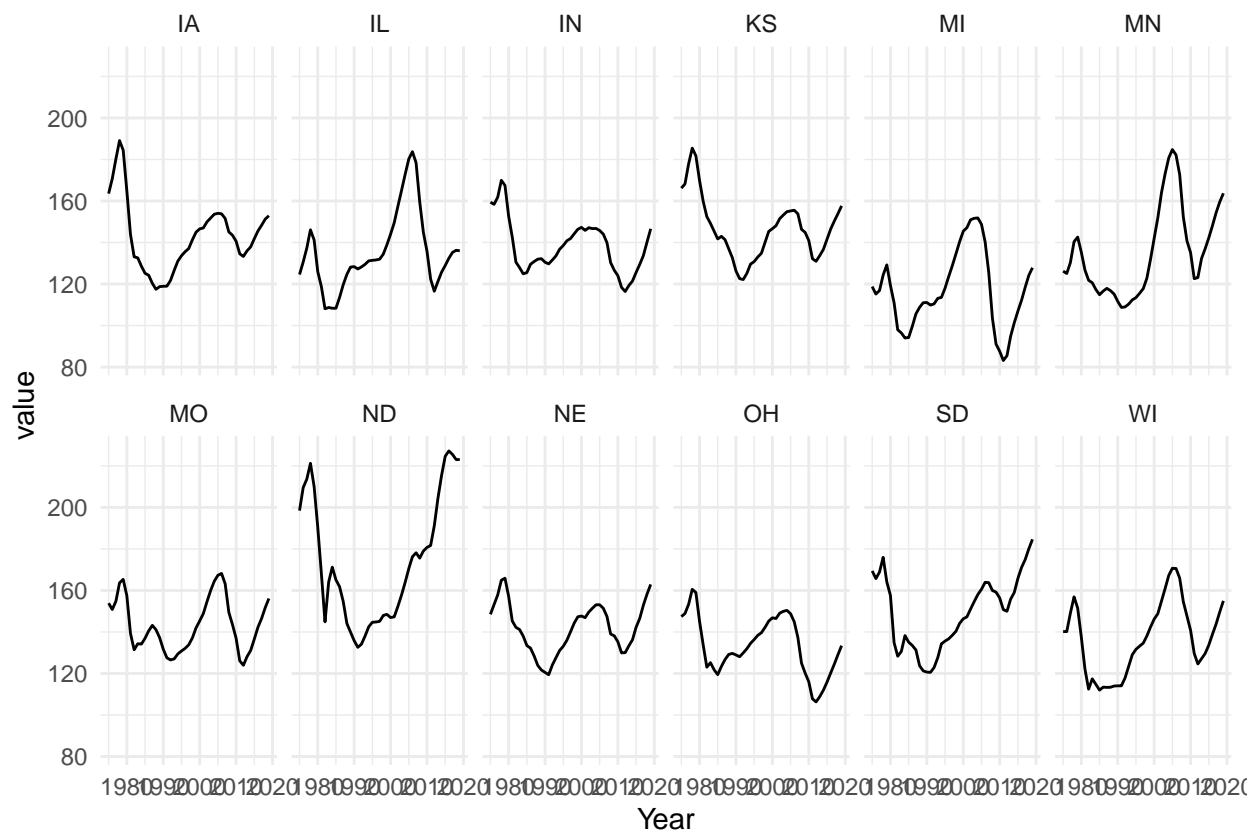


b. How have changes in prices varied by state?

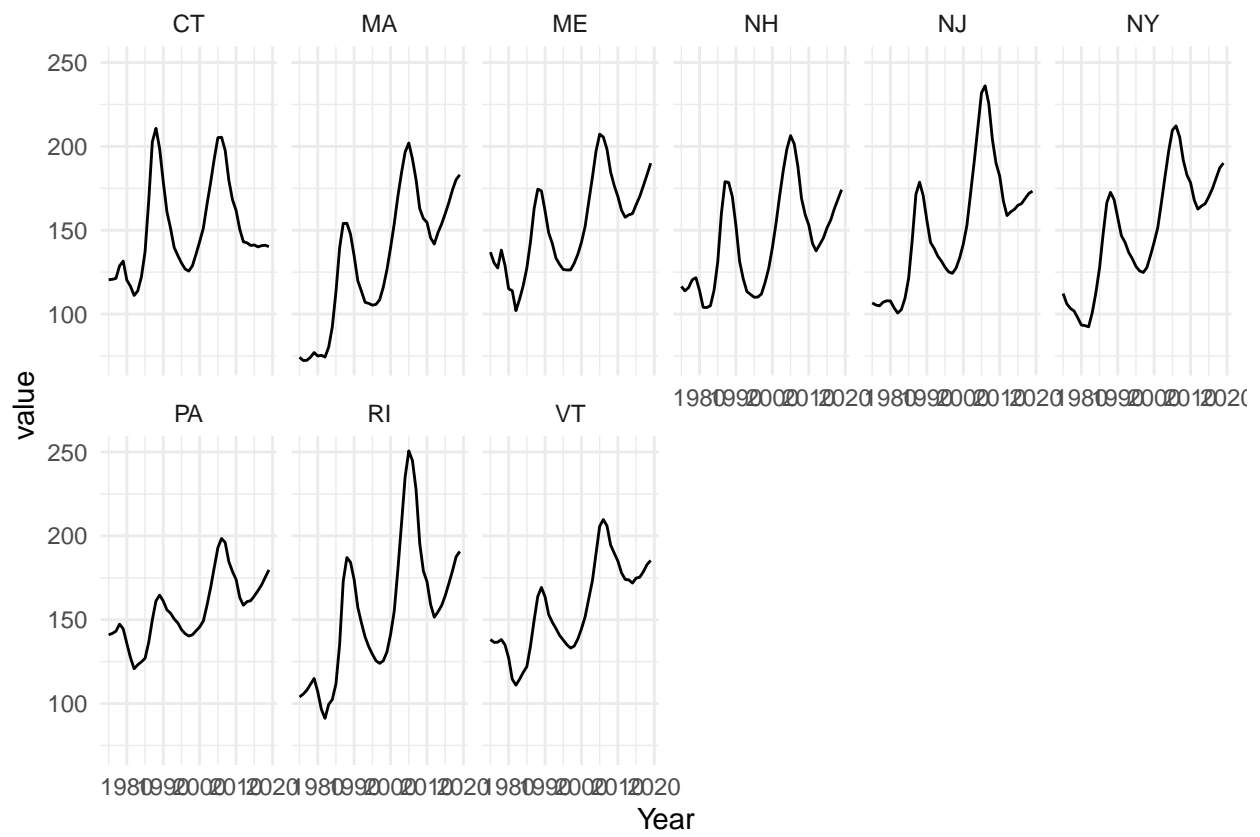
Resgion: West



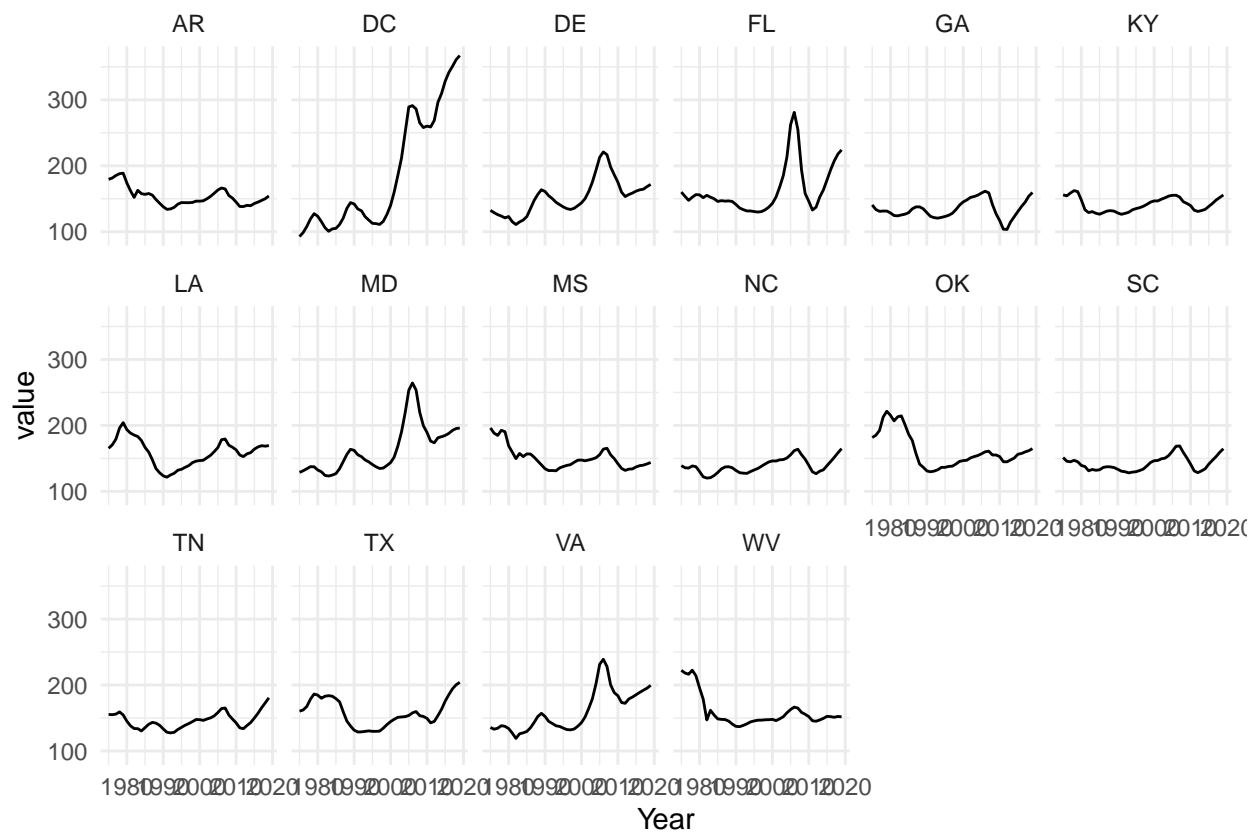
Resgion: Midwest



Resgion: Northeast

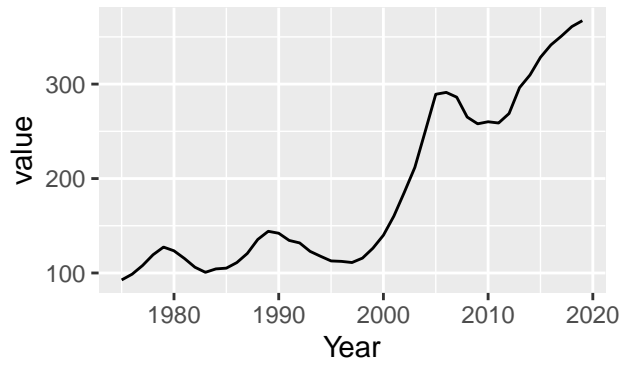


Resgion: South

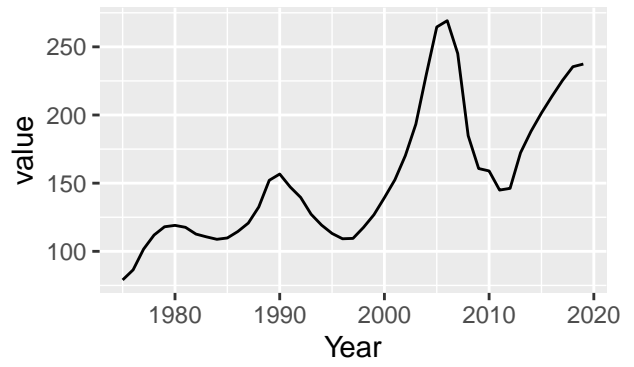


- c. Which states have seen the biggest increases in real house prices, and which have seen the biggest decreases?

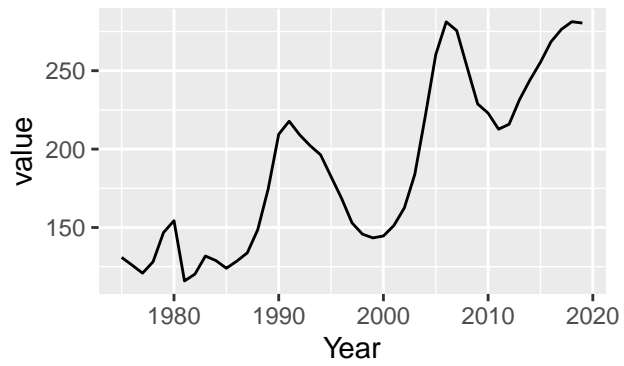
DISTRICT OF COLUMBIA



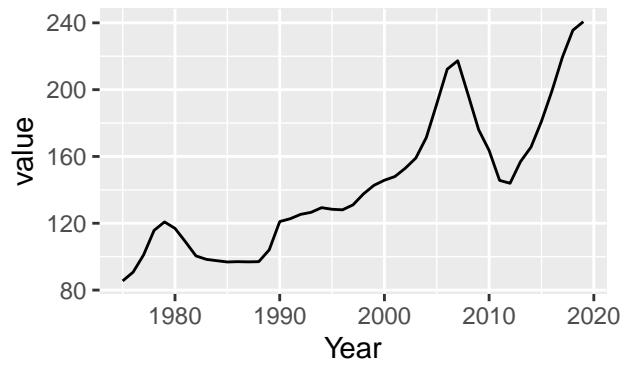
CALIFORNIA

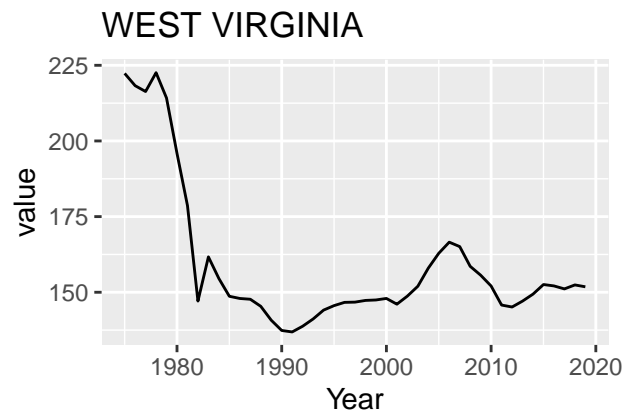
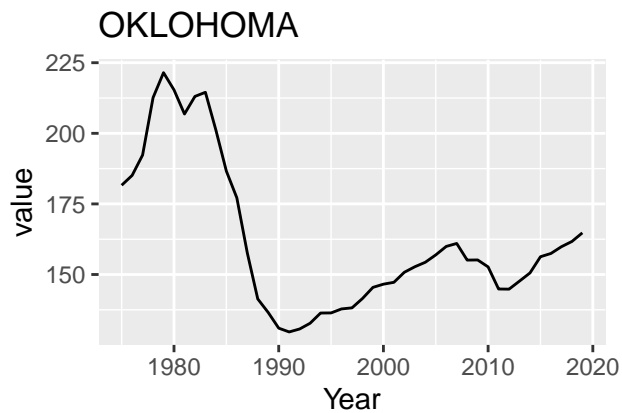
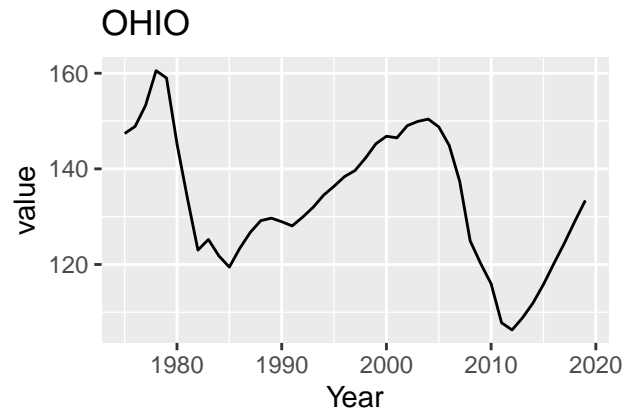
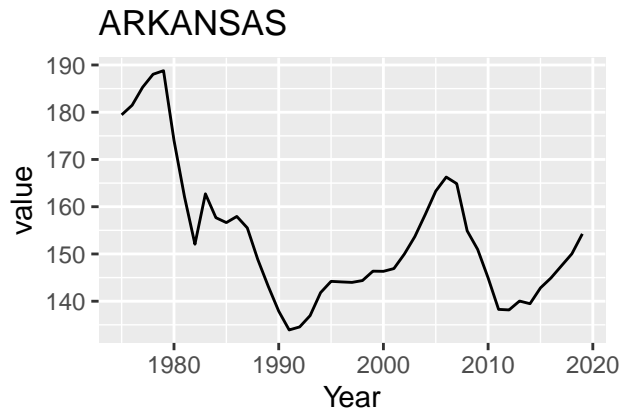


HAWAII



WASHINGTON

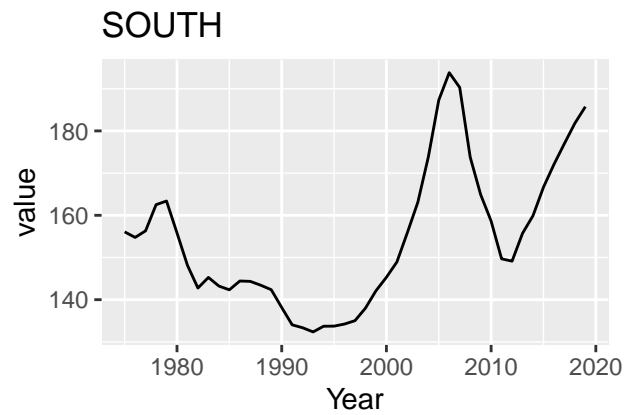
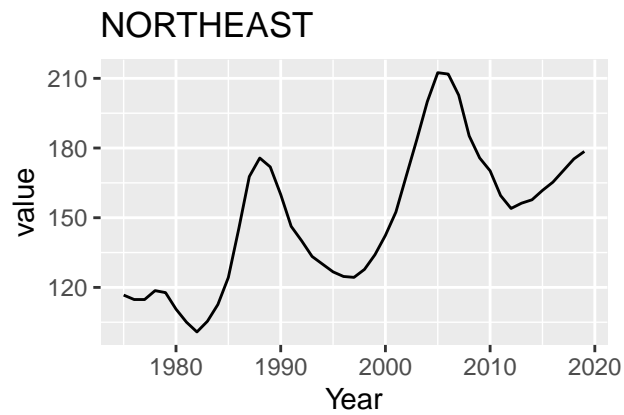
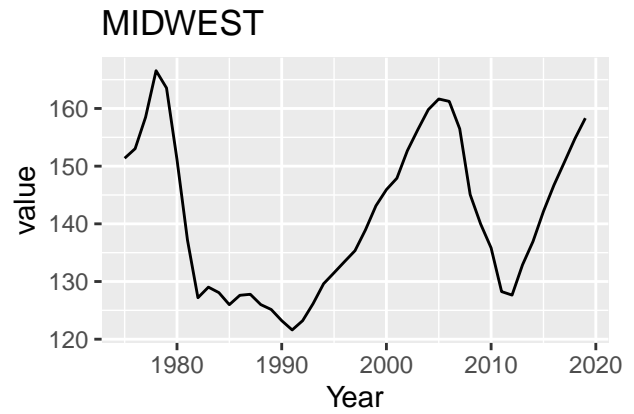
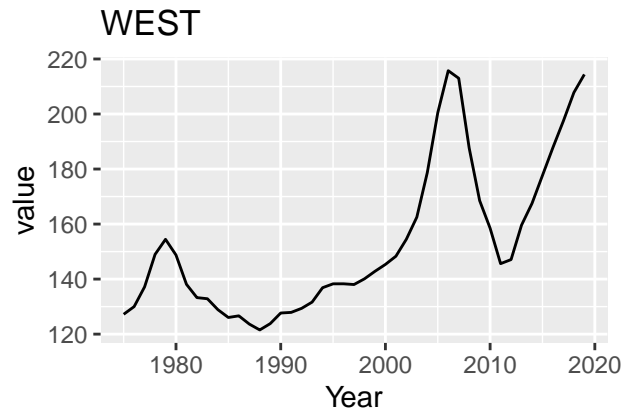




- d. Have changes in prices within each state mostly followed the same basic pattern, and are there outliers to that pattern?

the house prices within each state have mostly followed the basic pattern of rises and falls cycle. And we have observed outliers where they defy that pattern by showing a continuous drop cycle or rise cycle. The outlier states are West Virginia, Arkansas, District of Columbia, California, Washington. There might be more as well.

- e. Do the typical patterns vary between the four regions (Northeast, Midwest, South, and West)?



The regions also pretty much follow the same trend as the overall house prices. Northeast region has a gradual rise and so does the West region. The period 1980-1990 was a consistently low patch for all except the Northeast region.