CS 661 Chapter 5 Assignment

Create a string called alphabet containing 'abcdefghijklmnopqrstuvwxyz', then perform the following separate slice operations to obtain:

1. The first half of the string using starting and ending indices.
2. The first half of the string using only the ending index.
3. The second half of the string using starting and ending indices.
4. The second half of the string using only the starting index.
5. Every second letter in the string starting with 'a'.
6. The entire string in reverse.
7. Every third letter of the string in reverse starting with 'z'.

Create a function that receives a list and returns a (possibly shorter) list containing only the unique values in sorted order. Test your function with a list of numbers and a list of strings.

Using the list in Exercise 5.28 and the techniques you learned in Section 5.17.2, display a bar chart showing the response frequencies and their percentages of the total responses.

Modify the die-rolling simulation in Section 5.17.2 to omit displaying the frequencies and percentages above each bar. Try to minimize the number of lines of code.

Modify your simulation of rolling two dice from the previous exercise to update the bar plot dynamically as you roll the dice. Use the techniques you learned in Section 6.4.2