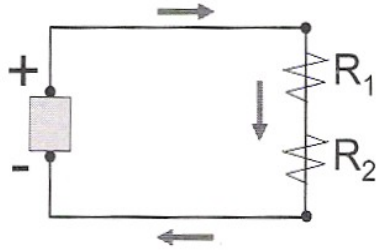


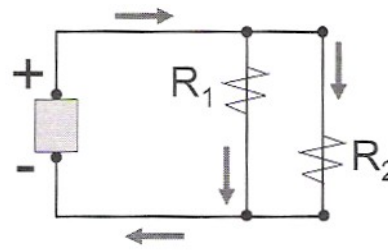
## Resistors & Dialogs

For this program, you will want to know about: Lists and their methods; tkinter's `simplifiedialog` library; and creating formatted output and storing it in a variable (instead of immediately outputting to the console).

Resistors in a circuit can be organized in *series* or in *parallel*. The diagrams below show the difference:



resistors in series

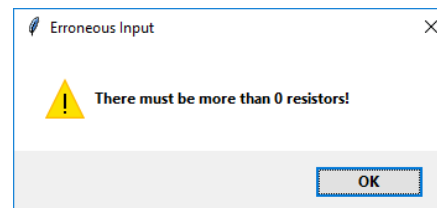
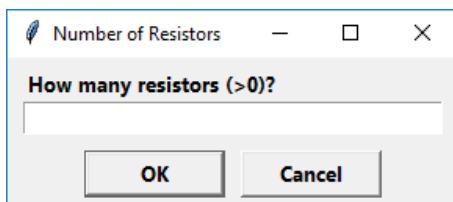


resistors in parallel

In the case of series resistors, the *effective resistance* is simply the sum of the individual resistors. For parallel resistors, the effective resistance is computed as:

$$R_{eff} = \frac{1}{\sum_{i=1}^n \frac{1}{R_i}}$$

Write a Python3 program that computes the effective resistance for **parallel** resistors only. Use tkinter's `simplifiedialog.askinteger()` dialog box to ask the user how many resistors are in the circuit. If the provided number of resistors is not positive, use tkinter's `messagebox.showwarning()` dialog box to provide an error message as shown below and have the user provide another value until a positive value is given.



Once there are no errors, collect the values of the resistors via tkinter's `simplifiedialog.askfloat()` dialog box using a FOR loop. You may assume the user will only provide positive, non-zero values for the resistors. As you collect the resistor values, compute the reciprocal of each resistance and store them in a list, `Rinv`, by making use of the list's `append()` method.

When all resistors are collected and the reciprocals computed, use the `sum()` function to compute the sum of the elements of `Rinv` and save that as `Rsum` (is this a list, too?). Take the reciprocal of `Rsum` and save it as `Reff`.

Report `Reff` to three decimal places using tkinter's `messagebox.showinfo()` function by making a separate formatted string variable and then sending that string variable to the `messagebox.showinfo()` function as the `message` attribute.

