

Questions on Data Input

1. Write a Processing sketch that takes a text file as input and prints out the number of words in the file.
2. Write a sketch that takes two Strings as input and finds the longest common substring.
3. Modify the UserInput sketch so that the user has the option to delete the current final letter in the string.
4. Write a simple calculator sketch that lets the user enter a simple binary arithmetic operation such as "5 + 3" or "2 * 6" and then prints out the correct answer.
5. Write a Processing sketch that reads a text file and prints out a list giving each distinct word in the file along with the frequency with which each word occurs in the file. For example, if the input text is

"Processing is good for processing text files and XML files"

then the output should be

```
processing 2
is 1
good 1
for 1
text 1
files 2
and 1
xml 1
```

Make all the words lower case first!

6. Modify the Bubbles sketch so that the input data is in an appropriate XML data format. For example, you could have a highest-level element called "bubbles", then an element called "bubble", then elements for each of the attributes of a Bubble object.
7. Modify the Bubbles sketch so that you can stop the sketch and then restart it again with the bubbles in exactly the same position they were in when you stopped it.
8. Write a sketch that finds the current temperature in 5 different cities and displays a graph showing the temperatures next to each other.
9. Write a sketch that finds the number of times that the string "Tom Sawyer" occurs in "The Adventures of Huckleberry Finn" by Mark Twain. (Hint: Use the plain text version downloadable from Project Gutenberg.)