Reading from Files II

```
file = open("filename.txt", "r")
for line in file:
  line = line.rstrip()
  # do something with line
file.close()
```

Reading one string per line

```
file = open("filename.txt", "r")
for line in file:
  line = line.rstrip()
  num = int(line)
  # do something with num
file.close()
```

Reading one int per line

- Create a text file containing between five and seven positive integers, one per line.
- Write a program to calculate the consecutive differences between numbers in the file.
  - Use the sliding window technique!
- **Challenge**: Edit your program to also print out the largest and smallest numbers in the file.

- Problem that re-occurs often in CS:
- Finding the largest item in a set of things where you can only look at each thing once.

- Pseudocode for finding the largest number in a collection of numbers:

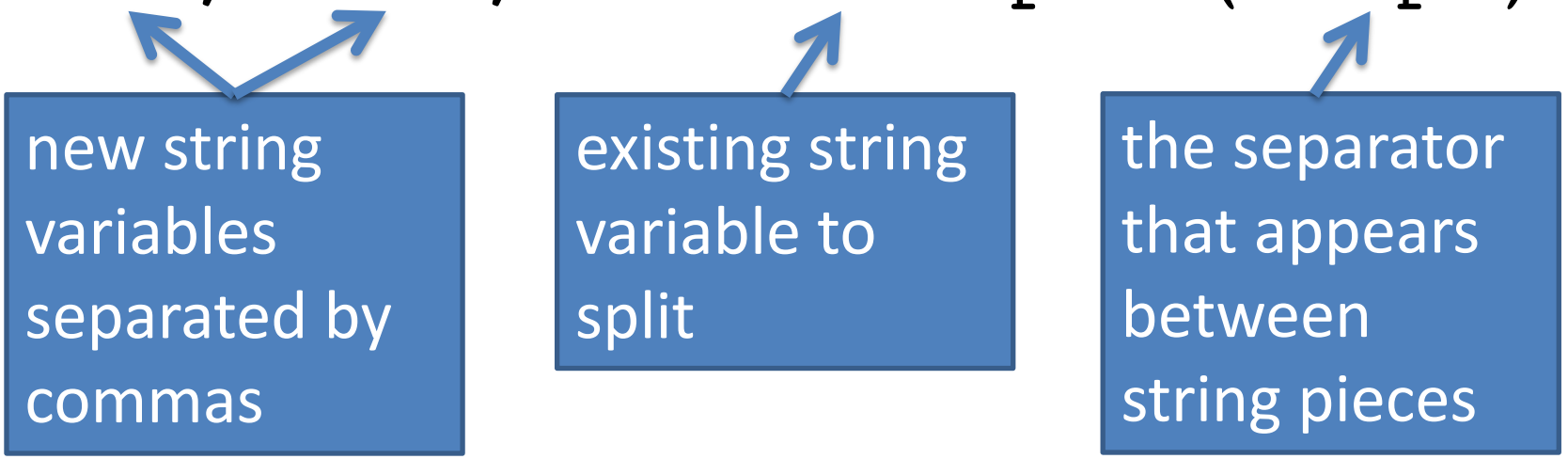
- **`largest`** = [smallest possible number that you could ever see]
- look at each number once:
  if the current number > **`largest`**, then
    `largest` = current number

- after this loop, **`largest`** will have the largest number in it!

Split function

Splits a string into multiple string variables based on a separator:

```
var1, var2, … = var.split("sep")
```



Reading multiple strings per line

```
file = open("filename.txt", "r")
for line in file:
  line = line.rstrip()
  var1, var2, … = var.split("sep")
  # do something with var1, var2, etc.
```

Using the people.txt file from the website:

- Write a program to print the year the oldest person was born, and the year the youngest person was born.
- Edit your program to print the ***names*** of the oldest and youngest person.
- Make a new program to print the names of the person who comes first alphabetically (by last name), and last alphabetically.