

CS 153/SE 153

Concepts of Compiler Design

Fall 2023
Instructor: Ron Mak

Assignment #1

Assigned: Tuesday, August 21
Due: Tuesday, August 28 at 4:00 PM
Individual assignment, 100 points max

Compile and execute a Pascal program

The purpose of this assignment is to give you a crash course in Pascal programming. Use one of the following online Pascal interactive development environments (IDE):

- http://rextester.com/l/pascal_online_compiler
- https://www.tutorialspoint.com/compile_pascal_online.php
- <https://www.jdoodle.com/execute-pascal-online>

Copy and paste the source code for the Pascal `Presidents.pas` and the input text file `presidents.txt` into the appropriate windows of your chosen development environment. Execute the program and get its runtime output.

- <http://www.cs.sjsu.edu/~mak/CS153/assignments/1/Presidents.pas>
- <http://www.cs.sjsu.edu/~mak/CS153/assignments/1/presidents.txt>

Make screenshots of the Pascal IDE which include the Pascal program and its output.

Pascal text input

- If `ch` is a character variable, then `read(ch)` will read the next character from the standard input.
- If `n` is an integer variable, then `read(n)` will read the next integer value from the standard input.
- A call to `readln` will skip the rest of the current input line. Then the next call to `read` will read starting on the next input line.
- Boolean functions `eofln` and `eof` without parameters test whether the standard input is at the end of the current line or at the end of file, respectively. (If you're typing input data into a Windows command window, a line containing only control-Z is the end-of-file marker. On Linux and the Mac, it's control-D.)

Pascal's built-in string type

Read online how to use the string type:

- <https://wiki.freepascal.org/String>
- <https://www.freepascal.org/docs-html/rtl/sysutils/stringfunctions.html>

To use Pascal string functions, you may need to add the line

```
Uses sysutils;
```

at the beginning of your program.

What to submit to Canvas

Your screen shots. Zip the files together and submit the zip file into Canvas:
Assignment #1.

Rubric

Your submission will be graded according to these criteria:

Criteria	Max points
Good screenshots	100