Lab 1 Tests

Name: Username:

For any credit on this lab, the program MUST read data into an array of Job structures from an input file, use this array, and have and use at least three functions other than the main function.

* (10 points) Comments and style
* (4 points) Relevance questions
* Program correctness (86 points)
  + (7 points) Constants
  + (4 points) Non-existent file
  + (4 points) Empty file
  + (15 points) File with fewer than 10 and more than 10 jobs
  + (18 points) Searching by title
  + (18 points) Searching by skill
  + (10 points) Job output sorted by job title
  + (10 points) Miscellaneous

|  |  |  |
| --- | --- | --- |
| **Purpose** | **Input** | **Output** |
| Non-existent file | blahblah.dat | Welcome to the Jobs.com  Jobs file: blahblah.txt  Input file blahblah.txt does not exist. Please contact the administrator.  Thank you for using Jobs.com. |
| Empty file created with the Linux command  touch empty.txt | empty.txt | Welcome to the Jobs.com  Jobs file: empty.txt  Input file empty.txt is empty. Please contact the administrator.  Thank you for using Jobs.com. |
| File Knoxville with the first 4 of the 11 jobs in it listed below. | Knoxville  1  developer  3 |  |
| Welcome to the Jobs.com  Jobs file: Knoxville  1 Search for job by title  2 Search for a job by skill  3 Quit  Option> 1  Job title: developer  Job Title Salary Company  -------------------------------------------------------------------------------  UI Web Developer $ 83200 ITR  Vue, Angular, or React  D3  Javascript  Java  Python  Node.js  Git  Relational database  Web Developer $ 60000 CAKE Websites and More  HTML CSS Javascript  PHP  SQL  1 Search for job by title  2 Search for a job by skill  3 Quit  Option> 3  Thank you for using Jobs.com. | | |
| File Knoxville with the all of the 11 jobs in it listed below. | Knoxville  1  developer  2  git  3 | |
| Welcome to the Jobs.com  Jobs file: Knoxville  1 Search for job by title  2 Search for a job by skill  3 Quit  Option> 1  Job title: developer  Job Title Salary Company  -------------------------------------------------------------------------------  .NET Developer – Remote $ 0 General Dynamics Information Technology  Javascript  Angular  C#  ASP  Relational database  HTML  JQuery  JSON  REST  Front-End Developer $ 0 CGI Group, Inc.  Agile  HTML5  CSS3  Javascript  Angular  NodeJS  AJAX  Bitbucket, Git, or Mercurial  Jr. App Developer $ 64480 Enhance IT  C++  Java  REST  Git  Senior Back-End Developer $ 100000 Daxor Corporation  C#  SQL  MVC  Quality Assurance  .NET  Vue  Selenium  UI Web Developer $ 83200 ITR  Vue, Angular, or React  D3  Javascript  Java  Python  Node.js  Git  Relational database  Web Application Developer $ 72500 Solution Consulting Group  PHP  SQL  AWS  Bootstrap  Angular  Web Developer $ 60000 CAKE Websites and More  HTML CSS Javascript  PHP  SQL  1 Search for job by title  2 Search for a job by skill  3 Quit  Option> 2  Job skill: git  Job Title Salary Company  -------------------------------------------------------------------------------  Front-End Developer $ 0 CGI Group, Inc.  Agile  HTML5  CSS3  Javascript  Angular  NodeJS  AJAX  Bitbucket, Git, or Mercurial  Jr. App Developer $ 64480 Enhance IT  C++  Java  REST  Git  UI Web Developer $ 83200 ITR  Vue, Angular, or React  D3  Javascript  Java  Python  Node.js  Git  Relational database  1 Search for job by title  2 Search for a job by skill  3 Quit  Option> 3  Thank you for using Jobs.com. | | |

Input file data:

Entry Level Programmer

4

SQL

Relational database

C#

ASP .NET

0

DEVNET Inc.

Web Developer

5

HTML  
CSS  
Javascript

PHP

SQL

60000

CAKE Websites and More

Software (.NET) Engineer

3

Oracle

AWS

Angular

0

Clayton Homes

UI Web Developer

8

Vue, Angular, or React

D3

Javascript

Java

Python

Node.js

Git

Relational database

83200

ITR

.NET Developer – Remote

9

Javascript

Angular

C#

ASP

Relational database

HTML

JQuery

JSON

REST

0

General Dynamics Information Technology

Jr. App Developer

4

C++

Java

REST

Git

64480

Enhance IT

Front-End Developer

8

Agile

HTML5

CSS3

Javascript

Angular

NodeJS

AJAX

Bitbucket, Git, or Mercurial

0

CGI Group, Inc.

Senior Back-End Developer

7

C#

SQL

MVC

Quality Assurance

.NET

Vue

Selenium

100000

Daxor Corporation

Web Application Developer

5

PHP

SQL

AWS

Bootstrap

Angular

72500

Solution Consulting Group

Entry Level Computer Programmer

0

0

Revature

Entry Level Software Developer

3

Java

C++

SQL

57000

Quintrix

PHP Developer

3

PHP

Javascript

Angular

65500

Solution Consulting Group