Alex Reichel

Data Structures and Algorithms II

Project 04

User’s Manual

1. Setup and Compilation

Download and unzip Submission from e learning on. A Linux box in the multi-platform lab.

1. Submission includes:

* OfflineBin.hpp
* OfflineBin.cpp
* main.cpp
* OnlineBin.cpp
* Online.hpp
* OptimalBin.cpp
* OptimalBin.hpp
* items.txt

1. Environment: This program has been tested in the SSH server and Eclipse
2. Compiling: This program includes a Makefile, at the command line in Linux, type make. The program produces an executable entitled speller

Running the program: Be sure names.txt and Filemaker.cpp are in the same directory as the executable. Issue the command make or “ ./main\_print ” to run the program. The Program will take 2 minutes and 30 seconds to compute the optimal solution.

No user input needed

Output: All output goes to the console. Output will display the total time taken by both solutions as well as their percent of optimal

Policy Total Bins used

Optimal Algorithm 5

Online Algorithm

First Fit 6

Next Fit 6

Best Fit 6

Offline Algorithm

First Fit 5

Best Fit 5

Optimal Fit Results 5

Bucket num: 1

0.37 0.41 0.22

Bucket num: 2

0.33 0.33 0.33

Bucket num: 3

0.19 0.81

Bucket num: 4

0.755 0.245

Bucket num: 5

0.5 0.5

Online First Fit results

Bin number : 1

0.41 0.33 0.245

Bin number : 2

0.19 0.5 0.22

Bin number : 3

0.755

Bin number : 4

0.33 0.5

Bin number : 5

0.33 0.37

Bin number : 6

0.81

Online next Fit results

Bin number : 1

0.41 0.33 0.245

Bin number : 2

0.19 0.5

Bin number : 3

0.755

Bin number : 4

0.33 0.22

Bin number : 5

0.5 0.33

Bin number : 6

0.81

Online Best Fit results

Bin number : 1

0.41 0.33 0.245

Bin number : 2

0.19 0.5 0.22

Bin number : 3

0.755

Bin number : 4

0.33 0.5

Bin number : 5

0.33 0.37

Bin number : 6

0.81

Offline First Fit results

Bin number : 1

0.81 0.19

Bin number : 2

0.755 0.245

Bin number : 3

0.5 0.5

Bin number : 4

0.41 0.37 0.22

Bin number : 5

0.33 0.33 0.33

Offline Best Fit results

Bin number : 1

0.81 0.19

Bin number : 2

0.755 0.245

Bin number : 3

0.5 0.5

Bin number : 4

0.41 0.37 0.22

Bin number : 5

0.33 0.33 0.33