

Database Systems Lab

SESSION 6

Overview

This session takes the PDS to a logical conclusion by implementing a full set of functions necessary to implement a small database system.

While all the code return so far can be retained and used, they may require minor changes and renaming as suggested in the given pds.h file.

Deliverables:

1. pds_create_schema.c
Contains a main() programme that take a TEXT containing database schema information and create a .db file which can be used by application. This program simply calles pds_create_schema() function present in pds.c
2. pds.c
Updated implementation of existing functions and some new functions as per specifications given in pds.h

Testing

- a. Use contact_loader.c program to import contacts in bulk for testing. Input file with data is given to you.
- b. The following driver program is given to you:
 - pds_tester.c (generic testing with input data file like testcase.in).
 - This file takes a file with commands such as (CREATE, STORE, RETRIEVE, OPEN, CLOSE) inside.
- c. Test your program thoroughly with the above driver program with the test input file
- d. Do additional testing by creating your own test input files

Commands

- A. Use the following command for creating pds_create_schema executable:

```
gcc -o pds_create_schema pds_create_schema.c bst.c  
contact.c pds.c
```

Use pds_create_schema to create .db file using the following command:

```
pds_create_schema academia academia.txt
```

- B. Use the following command for creating pds_tester executable:

```
gcc -o pds_tester bst.c contact.c pds.c pds_tester.c
```

For testing using pds_tester, use the following command:

```
pds_tester testcase.in
```

Submission

Upload ONLY the following file to LMS:

- pds.c
- pds_create_schema.c

YOU ARE NOT EXPECTED CHANGE ANY OF THE OTHER FILES GIVEN TO YOU