Database Systems Lab

SESSION 4

Search on an arbitrary field

PDS so far supports only search by an key on which an index is available. For testing so far, we have been testing PDS using contact_id as the indexed key. In this lab, you will implement a new search function for searching on an arbitrary attribute on which index is NOT available. For example, the new function can be used to search based on the contact name instead of contact_id.

Activity Details

a. You need to implement two new functions in rollno_contact.c:
search_contact_by_phone for search based on phone number and
match_contact_phone for matching the record with the search field

b. You need to implement a new function named **get_rec_by_non_ndx_key**. Refer to the given pds.h file for instructions on the changes to be done to PDS functions

c. A driver program called pds_tester is given to you. This file takes a file with commands such as (STORE, NDX_SEARCH, NON_NDX_SEARCH, OPEN, CLOSE) inside.

d. Test your program thoroughly with the driver program and test case file. One sample test case file is given to you

Commands

- Use the following command for creating pds_tester executable:

```
gcc -o pds_tester roll_number_contact.c roll_number_pds.c bst.c
pds_tester.c
```

For testing using pds_tester, use the following command:

```
pds_tester public_testcase.in
```

Submission

Upload ONLY the following files to LMS:

roll_number_pds.c and roll_number_contact.c

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