Database Systems Lab

SESSION 2

Implementing non-indexed store and read

In this lab session, you will begin with a basic implementation of Personal Data Store (PDS). This version **does not use any index**.

Question:

You are given a partial implementation of PDS.
Complete the following tasks:

Implement the following functions in pds.c

```
int pds_open( char *repo_name, int rec_size );
int put_rec_by_key( int key, struct Contact *rec );
int get_rec_by_key( int key, struct Contact *rec );
int pds_close();
```

1. Implement pds_open by adding the following functionality:
    a. Open the file
    b. Store file pointer in a global strcut
2. Implement get_rec_by_key:
    a. Read record-record-by record from data file
    b. Compare key of the record with the given key
    c. Return record if record is found
3. Implement put_rec_by_key:
    a. Store the given record at the END of the data file
4. Implement pds_close
    a. Close the repo file
    b. Update file pointer and status in global struct

Output

- Use the following command for creating contact_driver executable:

```
gcc -o contact_driver contact.c pds.c contact_driver.c

./contact_driver
```

Submission

a. Test your program thoroughly with the given driver program
b. Upload only pds.c file to LMS