

# Database Systems Lab

---

## SESSION 2

### Building in-memory index for a data file

In this lab session, you will build a Binary Search Tree (BST) index as part of the Personal Data Store (PDS) implementation. You are given a partial implementation of PDS.

Complete the following tasks:

```
contact.c:    // TO-DO: call put_rec_by_key to store the contact
contact.c:    status = // TO-DO
contact.c:    status=//TO-DO: Return appropriate success/failure status from contact.h
contact.c:    status=//TO-DO: Return appropriate success/failure status from contact.h
pds.c:  if( // TO-DO )
pds.c:  repo_handle.pds_data_fp = // TO-DO
pds.c:  repo_handle.repo_status = // TO-DO set the status appropriately from pds.h
pds.c:  // TO-DO
pds.c:  // TO-DO
```

Create a makefile to create the following executables:

1. contact\_driver: contact.o pds.o

### Testing Procedure

1. Use contact\_driver to test the storage and retrieval of contact data repository

### Submission

1. All the source files associated with the assignment:
  - contact.h
  - contact.c
  - contact\_driver.c
  - pds.h
  - pds.c
  - makefile