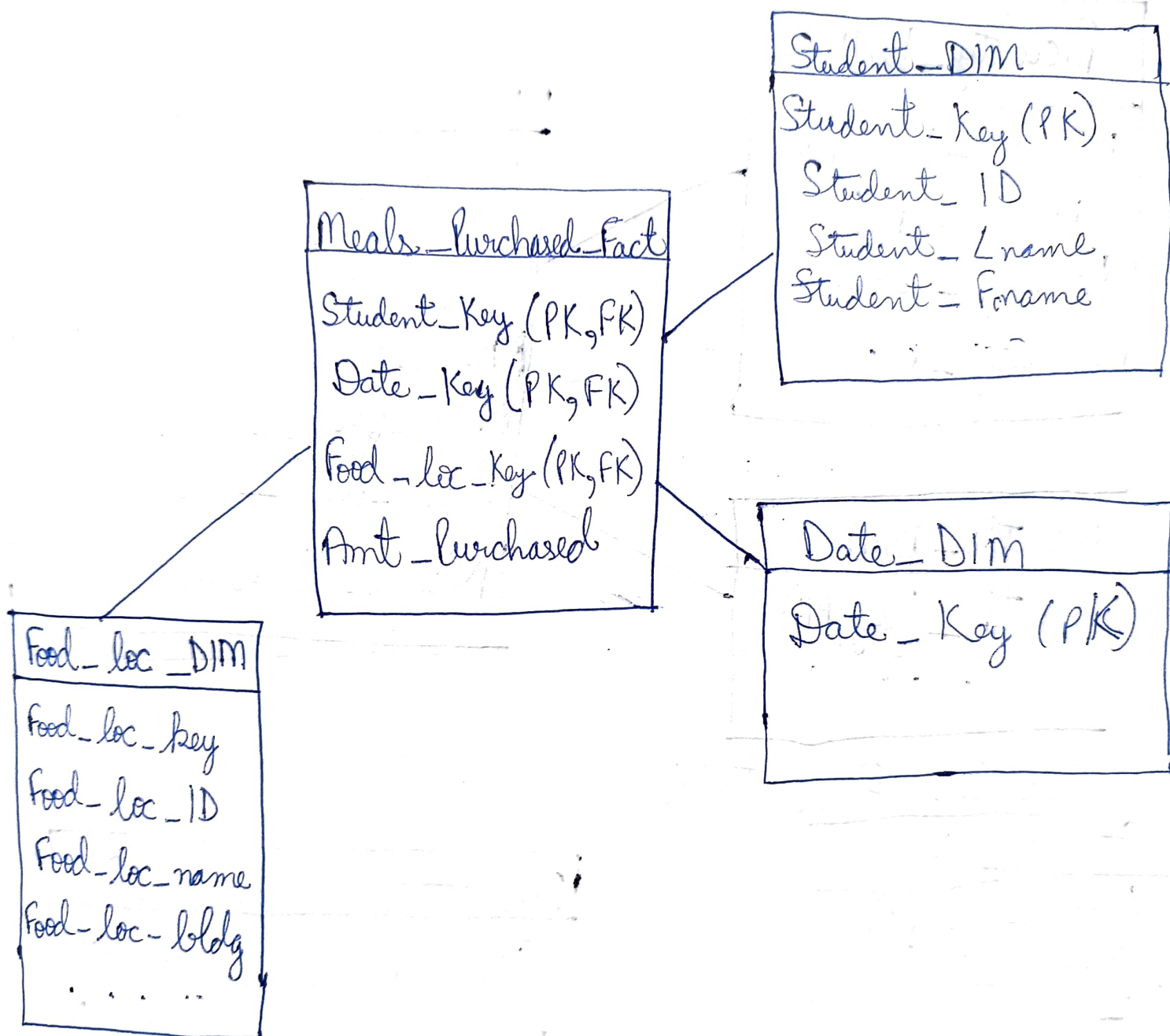


Q1.

Transaction-grained Fact Table



Q2. Periodic Snapshot Fact Table.

Faculty-DIM
Faculty-Key (PK)
Faculty-ID \uparrow
Faculty-Lname
Faculty-Fname

Month-DIM
Month-Key (PK)
...

Publication-EOM-Snapshot
Faculty-Key (PK, FK)
Month-Key (PK, FK)
Num_Publ_Initial_Review
Num_Publ_Final_Review
Num_Publ_Prepublication
Num_Published

Q3. Factless Fact Table.

Student-DIM
Student-Key (PK)
Student-ID \uparrow
Student-Lname
Student-Fname

Date-DIM
Date-Key (PK)
...

Orientation-Volunteer-Fact
Student-Key (PK, FK)
Date-Begin-Key (PK, FK)
Date-End-Key (PK, FK)

Q 4. Accumulating Snapshot Fact Table.

Faculty-DIM
Faculty-Key (PK)
Faculty-ID
Faculty-Lname
Faculty-Fname

Date-DIM
Date-Key (PK)
.

Grant_Appl_Acc_Snapshot
Faculty-Key (PK, FK)
Grant_Source_Key (PK, FK)
Day_Submitted_Key (PK, FK)
Day_Init_Approval_Key (PK, FK)
Day_Final_Approval_Key (PK, FK)
Day_Grant_Paid_Key (PK, FK)
Emph_Screen_Key (PK, FK)
Emph_belims_Key (PK, FK)
Emph_Final_Key (PK, FK)
Emph_Payment_Key (PK, FK)
Days_Init_Approval
Days_Final_Approval
Days_Approval_to_Init
Amt_In_Initial_Approval
Amt_In_Final_Approval

Grant_Source-DIM
Grant_Source_Key (PK)
Grant_Source-ID
Grant_Source-Name