Date: 19/08/2022

1. The following are maintained by a book dealer.

AUTHOR( author\_id:int , name:string , city:string , country:string )

PUBLISHER( publisher\_id:int , name:string , city:string , country:string )

CATALOG( book\_id:int , title:string , author\_id:int , publisher\_id:int , category\_id:int , year:int , price:int)

CATEGORY( category\_id:int , description:string )

ORDER\_DETAILS( order\_no:int , book\_id:int , quantity:int )

- i) Create the above tables by properly specifying the primary keys.
- ii) Enter at least five tuples for each relation.
- iii) Find the total number of authors present in author relation.
- iv) Find the book which has maximum sale.
  - 2. Consider the following table "Book":

Acc-no	Yr_pub	title
734216	1982	Algorithm design
237235	1995	Database systems
631523	1992	Compiler design
543211	1991	programming
376112	1992	Machine design

- i) Select from the relation "Book" all the books whose year of publication is 1992.
- ii) Select from the relation "Book" all the books whose Acc-no is greater than equal to 56782.
- iii) List all the Title and Acc-no of the "Book" relation.
- iv) Using 'Rename operator' to rename the 'Acc-no' and 'Yr\_pub' into a 'SERIAL NO' and 'YEAR' in the ''Book'' relation.
  - 3. branch (branch\_name, branch\_city, assets)

customer (customer\_name, customer\_street, customer\_city)

account (account\_number, branch\_name, balance)

loan (loan\_number, branch\_name, amount)

depositor (customer\_name, account\_number)

borrower (customer\_name, loan\_number)

- i) Create the above tables by properly specifying the primary keys.
- ii) Enter at least five tuples for each relation.
- iii) Find all loans of over 12000rs.
- iv)display the branch names for a given city.

- $\boldsymbol{v})$  display depositor name for a specific account number.
- vi) display customer names whose names starts with specified character.