## Lab 07

## Create ER Diagrams

IT615 Database Management System, Autumn'2021; pm\_jat @ daiict

This week you create ER Diagrams for given case studies. Use software Dia (<a href="http://dia-installer.de/">http://dia-installer.de/</a>) for creating ERDs.

- 1. Consider maintaining database of books (let us say by an on-line book-store) with details of ISBN, Title, Price (consists of Currency, and Amount), Author-Name, Publisher-Name, Publisher-Address. A book has one (at least) or more authors, and published by exactly one publisher. ISBN is a universally unique number each book has. Some of books are reprinted by different publisher in some other country or region. In that case reprint of the book is given different ISBN, and will have different price in some other currency. Let us also maintain relationship of reprint with original publication.
- 2. Consider scenario where we need to create a database of student teams doing project in Database course. A number of students form groups for projects; a student cannot be in more than one group. For each group, we record Group No (Unique), Project Title, Student ID and Contact Number of the team leader. We also record details of members in each team; i.e., student id, name and email of each student. Also suppose there are TAs in the course, and a number of groups are assigned to each TA. A group is supervised by a single TA. For TAs, let us say we record TA-Stud-ID, TA-Name, TA-email, and TA-Contact-Number.

The projects are evaluated at multiple stages on multiple parameters. At each stage, set of evaluation parameters are drawn from a definite set of parameters. For each stage, maximum marks for each parameter is specified. [Evaluation happens for Group as a whole and for individual student for each parameter at each stage]

Assume that scope of the proposed database is limited to this course, and this semester only.