Chris Harms

Lab 9

1. You create indexes for all primary keys, so for Mtype ID, the combo of Building ID and Room No, TS ID, Emp ID, Sched ID, Ctype ID, the combo of Section ID and Course ID, and Course ID.
2. You could partition rooms by the room type, you could partition courses by the course credits, you could partition timeslots by the day of the week, you could partition sections by the semester or year.
3. You could potentially combine the computer entity into the lab entity, or combine the prerequisites for each course into the course with an attribute instead of a relationship from course to course

Room

|  |  |  |  |
| --- | --- | --- | --- |
| RoomNo | Number | PK |  |
| BuildingID | Number | PK |  |
| RoomCapacity | Number |  |  |
| RoomType | Char (1) |  |  |

Section

|  |  |  |  |
| --- | --- | --- | --- |
| CourseID | Number | PK | FK |
| SectionID | Number | PK |  |
| EnrLimit | Number |  |  |
| Sem | VARCHAR (6) |  |  |
| Year | Number (4) |  |  |
| EmpID | Number |  | FK |

1. Create an index on the EmpRank field, make sure the PK of instructor has an index
2. Only need to create an index on EmpID
3. Create an index for RoomNo and BuildingID in Room Media, and an index for MediaType in Media, and indexes for the primark keys in both tables being joined
4. A sequential index on StartTime in TimeSlot

Part 2: