Assignment:

1. **Use the case presented below to develop an ERD in Visio. Copy paste the visio file at the bottom of this document. As a minimum you must show the PK, FK(if any), and at least one non-key attribute.**
2. **Use the case presented above to map the ERD you developed in #1 into relations. Clearly note the primary key as well as any applicable foreign key, composite keys etc. in your relations. You may use the notations presented in Physical database design Powerpoint slides.**

Case:

During peak periods, Temporary Employment Corporation (TEC) places temporary workers in companies. TEC's manager gives you the following description of the business:

- TEC's management wants to keep track of the following entities: **COMPANY, OPENING, QUALIFICATION, CANDIDATE, JOB_HISTORY, PLACEMENT, COURSE, and SESSION**.
- TEC has a file of candidates who are willing to work.
- Any candidate who has worked before has a specific job history. (Naturally, no job history exists if the candidate has never worked.) Each time the candidate works, one additional job history record is created.
- Each candidate has earned several qualifications. Each qualification may be earned by more than one candidate. (For example, more than one candidate may have earned a Bachelor of Business Administration degree or a Microsoft Net-work Certification, and clearly a candidate may have earned both a BBA and a Microsoft Network Certification.)
- TEC offers courses to help candidates improve their qualifications.
- Every course develops one specific qualification; however, TEC does not offer a course for every qualification. Some qualifications are developed through multiple courses.
- Some courses cover advanced topics that require specific qualifications as pre-requisites. Some courses cover basic topics that do not require any prerequisite qualifications. A course can have several prerequisites. A qualification can be a prerequisite for more than one course.
- Courses are taught during training sessions. A training session is the presentation of a single course. Over time, TEC will offer many training sessions for each course; however, new courses may not have any training sessions scheduled right away.
- Candidates can pay a fee to attend a training session. A training session can accommodate several candidates, although new training sessions will not have any candidates registered at first.
- TEC also has a list of companies that request temporaries.
- Each time a company requests a temporary employee, TEC makes an entry in the Openings folder. That folder contains an opening number, a company name, required qualifications, a starting date, an anticipated ending date, and hourly pay.
- Each opening requires only one specific or main qualification.
- When a candidate matches the qualification, the job is assigned, and an entry is made in the Placement Record folder. The folder contains such information as an opening number, candidate number, and total hours worked. In addition, an entry is made in the job history for the candidate.
- An opening can be filled by many candidates, and a candidate can fill many openings.
- TEC uses special codes to describe a candidate's qualifications for an opening. For example, SEC-45 refers to Secretarial work; candidate must type at least 45 words per minute; SEC-60 CLERK refers to Secretarial work; candidate must type at least 60 words per minute.