**NOTE: Draw ER diagram for the following scenarios and submit on 2/07/2019**

1. Draw E-R diagram to depict the following requirements

An *operator* can work on many *machines* and each *machine* has many *operators*. Each *machine* belongs to one *department* but a *department* can have many *machines*.

1. Suppose you are given the following requirements for a simple database for the National Hockey League (NHL):

the NHL has many teams,

each team has a name, a city, a coach, a captain, and a set of players,

each player belongs to only one team,

each player has a name, a position (such as *left wing* or *goalie*), a skill level, and a set

of injury records,

a team captain is also a player,

a game is played between two teams (referred to as host\_team and guest\_team) and

has a date (such as *May 11th, 1999*) and a score (such as *4 to 2*).

Construct a clean and concise ER diagram for the NHL database

1. The company you work for wants to digitize their time cards. You have been asked to design the database for submitting and approving time cards. Draw the ER diagram with the following information.

A timecard should have hours worked and date submitted and a unique id. Each timecard is associated with exactly one employee. Each time card has a status: it is either approved, not approved, or pending. Each employee has a unique id, name and address. Each employee submits a time card every pay period. i.e. In one year, they will submit multiple time cards. Each employee either has direct deposit or physical check as their method of payment. Each employee is associated with exactly one manager. Each manager has unique id and a name. The manager is in charge of multiple employees and he approves time cards for multiple employees.