FOR 240 – Lab 5 Assignment
Timber Cruising Database Applications – Tables and Queries
Introduction to Computing in Natural Resources

In this lab, you are required to use Microsoft Access and the database design knowledge you have to design a database for timber cruising. What you need to do are to:

1. Create a database and name it as TimberCruising.mdb,
2. Build the following tables
   - (1) Table Plot (tblPlot)

PlotID	Integer, primary key
PlotType	Text
Forest	Text
Crew	Text
Date	Date/Time

   - (2) Table Trees (tblTrees)

TreeID	Integer, primary key
PlotID	Integer, not null, refers to PlotID in Table Plot
Species	Text
DBH	Single
MHT	Single
THT	Single

3. Design the following queries to write reports:

   a. Basal area and volume summaries by plot
   b. Basal area and volume summaries by species

You can use the following equations to compute the basal area and volume for each individual tree:

$$BA = 0.005454154 * DBH^2$$
$$VOL = (0.04 - 0.02 * L^2 + 0.59 * L) * DBH$$

Where, BA = basal area, ft^2
          VOL = volume, ft^3
          DBH = diameter at breast height, inch
          L = merchantable height, the number of 16-foot logs

Please provide me a typed summary report together with a floppy diskette containing the database file (or email it to me) by the beginning of lab next week.