Objectives To set up multi-table queries that involve calculations. To produce a report based on a query, and to add calculations to it.

- (a) Copy the database e:\examples\jgb\Oscars.mdb to your d: drive to work with in this practical. You will need to use more than one of its tables in some of the exercises below!
- (b) In the Access Help topic Working with queries => Performing Calculations => Perform calculations in a query => Use the query design grid to calculate a sum..., read through the three items. (Some of these techniques were covered in Practical 3) Use the information to help you set up queries to find (i) the total number of nominations for all the films, taken together, in your database; and (ii) the total number of nominations for the films made by each director. (You do not need to include the nominations for acting. You should only display those fields you think appropriate. Are you satisfied that the information produced by your second query is given in a sensible order?) Print the query datasheets and QBE grids.
- (c) Work through Working with Reports => Calculating Totals and Using Expressions => Calculating Totals => Calculate a total or average for a group of or all records in a report
- (d) Set up a report showing, for each director, the titles of his or her films and the award categories for which they were nominated. (Again you may ignore the nominations for acting.) This cannot be based on a single table, so you should create a suitable query to base it on before you start the Report Wizard.
- (e) Now add figures to show the total number of nominations for each film and for each director. (You are warned that some films have a blank director entry, and these come first in alphabetical order of directors!) Print a few pages for your practical file.
- (f) Work through Working with Reports => Calculating Totals and Using Expressions => Calculating Totals => Calculate percentages in a report Add figures to show each film's nominations as a percentage of the grand total, and the director's nominations as a percentage of the grand total. Make sure that you include on your report suitable explanations of these figures. Print a sample of your report (enough to show all the features) for your file.
- (g) **Before signing off your practical**, the demonstrator may ask to look at your queries, and to preview your report or inspect it in design view. You may also be asked to discuss the design of the query underlying your report.

- (h) If you finish this practical early, you should try (as an optional extra) implementing the *Films & Cinemas* example discussed in lectures. You are not asked to put in *all* the data, but should set up the tables and relationships and put in some data. Decide
 - how you would implement the information on details like "Fri/Sat only";
 - how you would query to find the last performances for each film/cinema combination "on Saturday night", which is after midnight in some cases.