**Database Design Exercises**

**Exercise 2.1 – Simple Query – SELECT**

**Exercise 2.1.1 – All Columns**

Display all the data for the given tables:

a) department

b) salesperson

c) sale

d) contact

**Exercise 2.1.2 – Comments**

Copy your code from 2.1.1 and document with:

a) A comment line.

b) An inline comment.

c) A comment block

**Exercise 2.1.3 – Specifying Columns**

Display the specified data from the given tables:

a) departmentnumber and department name from department.

b) employeenumber, lastname and phonenumber from salesperson.

c) companynumber, ordernumber and ordervalue from sale.

d) job\_title and contact\_name from contact.

**Exercise 2.1.4 – Calculated / Virtual Column and Alias**

Display the specified data from the given tables:

a) departmentnumber, departmentname, salestarget as ‘Old Sales Target’ and

salestarget increased by 50% as ‘New Sales Target’ from department.

b) ordernumber, ordervalue as ‘Old Order Value’ and ordervalue reduced

by 50% as ‘New Order Value’ from sale.

**Exercise 2.1.5 – Arithmetic Operators**

Display the specified data from the given tables:

a)firstname, lastname, salary increased by 50% as ‘New Salary’,

salestarget increased by 50% as ‘New Target’ and New Salary \* 10%

+ New Target \* 20% as ‘Potential Bonus’ from salesperson.

**Exercise 2.1.6 – Arithmetic Operators using Brackets**

Copy and modify your code from 2.1.5 using brackets to make the calculation

clearer if you have not done so already.

**Exercise 2.1.7 – Arithmetic Operator on Text**

Display the specified data from the given tables:

a) company\_no, then contact\_code and contact\_name and job\_title all

as ‘Contact Details’ with a ‘/’ between each piece of data from contact.

**Exercise 2.1.8 – Function SUBSTRING**

Display the specified data from the given tables:

a) emp\_no, initial of first\_name as ‘First Initial’, initial of last\_name as

‘Last Name’ and first four characters of post\_code as ‘Post Code Region’

from salesperson.

**Exercise 2.1.9 – Function COALESCE**

Display the specified data from the given tables:

a) first\_name, last\_name and post\_code if populated or ‘No Post Code’ if

not populated from salesperson.

**Exercise 2.1.10 – DISTINCT**

Display the unique data from the given tables:

a) company\_no from contact.

b) company\_no and contact\_no from sale.