

Task 3 – Database

You are now going to prepare some reports using related tables in a database. Make sure all currency values display the same currency symbol and are set to two decimal places.

- 18** • Import the file **1803STAFF.csv** using a suitable database package.

Use these field names and data types:

Field Name	Data Type	Description
<i>Staff_ID</i>	Text	This is a unique identification for each employee
<i>Family_Name</i>	Text	
<i>First_Name</i>	Text	
<i>Job_Role_Code</i>	Text	
<i>Department_Code</i>	Text	
<i>Years_Service</i>	Numeric	
<i>Telephone</i>	Text	

- Set the *Staff_ID* field as a primary key. [3]

- 19** • Import the file **1803JOBS.csv** as a new table with all fields set as appropriate data types into your database.

- Set the *Job_Code* field as a primary key. [2]

- 20** • Import the file **1803DEPARTMENTS.csv** as a new table with all fields set as appropriate data types into your database.

- Set the *Dept_Code* field as a primary key. [2]

EVIDENCE 5

Place in your Evidence Document screenshots showing the field names and data types used in the three tables.

- 21** • Create one-to-many relationships as links between the:

- *Job_Code* field in the jobs table and the *Job_Role_Code* field in the staff table
- *Dept_Code* field in the departments table and the *Department_Code* field in the staff table.

EVIDENCE 6

Place in your Evidence Document screenshot(s) showing the relationships between the three tables.

[2]

- 22 • Create a data entry form using all the fields in the staff table. [1]
- 23 • Add the following record to the staff table using your form:

<i>Staff_ID</i>	<i>Family_Name</i>	<i>First_Name</i>	<i>Job_Role_Code</i>	<i>Department_Code</i>	<i>Years_Service</i>	<i>Telephone</i>
TU221	Kapoor	Shashi	PG	CH	1	5618

- Check your data entry for errors.

EVIDENCE 7

Place in your Evidence Document a screenshot showing this data in your form.

[1]

A pay increase is made for each year of service. You will calculate the current salary of each member of staff based on their years of service.

- 24 • Using fields from all tables produce a report which:
- contains a new field called **Current_Salary**. It is the *Base_Pay* for their job plus an increase of 400.00 for each year of service
 - displays the contents of this field as currency
 - shows only the records where the *Faculty* is **Engineering** but excludes staff with a *Job_Description* of Post graduate research
 - shows only the fields *Staff_ID*, *First_Name*, *Family_Name*, *Job_Description*, *Department*, *Faculty*, *Base_Pay*, *Years_Service* and *Current_Salary* in this order. Make sure all labels and data are fully visible
 - sorts the data into ascending order of years of service
 - has a page orientation of landscape and fits on a single page wide
 - calculates the average years of service for this *Faculty* and places it at the bottom of the report below the *Years_Service* column, formatted as an integer
 - has a label **Average time with the faculty** to the left of this number
 - includes the heading **Tawara University Faculty of Engineering** at the top of the page
 - has your name, Centre number and candidate number on each page of the report.
 - Save and print your report.

PRINTOUT 2

Make sure that you have entered your **name**, **Centre number** and **candidate number** on your report.

[11]

You are going to prepare a departmental telephone directory.

- 25 • Produce a new report from all the data which:
- includes a new field calculated at run-time with the title **External_Phone**
 - displays the full external telephone number of the member of staff by prefixing the internal four digit telephone number with **+77536**, for example, if the internal telephone number was 9999, this number should display as +775369999
 - only includes staff who work in the biology or chemistry departments
 - shows only the fields *First_Name*, *Family_Name*, *Job_Description*, *Department*, *Telephone* and *External_Phone* in this order
 - is sorted by *Department* in ascending order, then by *Family_Name* in ascending order and by *First_Name* in ascending order
 - is displayed on a single page in portrait orientation with all data fully visible
 - includes the title:
Departmental telephone directory
 - includes your name, Centre number and candidate number on the report.
- Save and print this report.

PRINTOUT 3

Make sure that you have your **name**, **Centre number** and **candidate number** on the report.

[8]

[Total: 30]