

National Council for Vocational Awards



Database Methods Practical Level 2

Tuesday 23 May, 1995

11.00 am - 1.00 pm

INSTRUCTIONS TO CANDIDATES

1. Attempt all five tasks.
2. Read the paper throughout before you carry out any of the tasks.
3. All printouts should have the candidate's name and examination number clearly displayed.
4. Printing may be carried out, under supervision, after the time allowed for the practical examination but no alterations may be made to saved files.

CHECKLIST OF REQUIREMENTS:

At the end of the Examination you should have the following items:

1. Database Structure Form (filled in by hand) from task 1.
2. A database file called APPLICS from task 1.
3. A data entry screen from task 2.
4. A full listing of the data from task 2.
5. A database file called FIRSTIME from task 3.
6. A listing showing mailing labels in sorted order from task 3.
7. A listing showing a report containing only records for those who are not first-time passport applicants. This is from task 4.
8. A listing showing a report for all passport applicants with changes to the data and the order of the fields. This is for task 5.

Introduction:

The passport office receives tens of thousands of passport applications each year. On the application form, applicants are asked to specify their name and address, sex, date of birth, place of birth, marital status, number of children, and how long the new passport will last for, among other details. In order to improve the standard of the service to the public, the passport office has decided to set up a database to record these details. Because the application procedure is simplified if the application is a renewal type, rather than a first-time application, the type of application is also recorded. Additionally, because the fee for a passport varies from year to year and even within the same year (the fee is reduced at off-peak times), details of the fee are also recorded.

Task 1 (6 marks)

From the database structure provided in Figure 1, create a database to store the data provided in Figure 2, using appropriate field names and data types. Write out this structure on the form provided and save the resulting database as 'APPLICS'.

Figure 1.

Name of Field	Data Type	Width
<i>Name of Applicant</i>	?	15
<i>Address</i>	?	25
<i>Sex</i>	?	1
<i>Date of Birth</i>	?	8
<i>Place of Birth</i>	?	15
<i>Marital Status</i>	?	7
<i>No. of Children</i>	?	2
<i>Duration of Passport (years)</i>	?	2
<i>Is this the first passport?</i>	?	1
<i>Passuort Fee</i>	?	3

Task 2 (10 marks)

Design and create a data input screen and then use the data input screen to enter the data shown in Figure 2 into the database 'APPLICS'. Print this data now or later.

With regard to the data input screen you should follow these guidelines:

- All fields must have suitable field labels.
- There should be two fields per line on the data input screen.
- The input screen should have a title, on top and centred.
- There is no need for borders or other effects.

Figure 2.

Name	Address	Sex	D O B.	Place of Birth	Marital Status	No. of Children	Passport Duration	First Time	Fee
Duffy John	Finglas Dublin	M	11/12/65	Dublin	Single	0	10	Y	45
Dunne Pat	Swords Dublin	M	03/03/53	Sligo	Married	16	10	N	45
Smith Jane	Naas Kildare	F	05/04/74	Naas	Single	1	3	Y	50
Byrne Joe	Clones	M	13/05/64	Dundalk	Single	0	10	N	30
Rooney Bob	Tralee Kerry	M	12/12/71	Kerry	Married	3	10	Y	45
Duffy John	Drogheda	M	11/12/65	Dublin	Single	4	3	Y	50
Al Saab Sheikh	Clonee Meath	M	03/04/53	Riyadh	Single	0	3	Y	50
Rice Anne	Bray Wicklow	F	2 1/02/65	Dublin	Single	0	10	Y	50
Dyas Martha	Cooley Louth	F	01/11/63	Drogheda	Married	2	10	N	50

Task 3 (14 marks)

The manager of the Passport Office has decided to write to all the first-time applicants to inform them of a delay in processing their applications. She requires mailing labels for this purpose. You have been asked to do the following:

- Extract from the Master file all records for first-time applicants. Save this subset to a new file called 'FIRSTTIME'.
- Organise the file 'FIRSTTIME' in ascending order of Name of Applicant (primary key) and descending order of Duration of Passport (secondary key). Use either indexes or the SORT command to achieve this task,
- Develop suitable labels from the sorted file with at least 2 labels across the page for printing now or later.

Task 4 (10 marks)

Extract a subset of records from the original database that consists of all records for applicants who are not first time applicants. Using this subset, create a report format using all the fields with the heading 'NON FIRST-TIME APPLICANTS' and column titles and a total for the passport fee field. Print this report now or later.

Task 5 (10 marks)

- (a) Make the following alterations to the database 'APPLICS':
- (i) Delete the record for **Pat Dunne**.
 - (ii) Change the address for Anne Rice from **Bray Wicklow** to **Wexford**.
- (b) Create a report format using this modified database that has the heading 'PASSPORT APPLICANTS' on it and shows only the name, address, sex, place of birth, number of children, duration, type of application (i.e. first passport or renewal) and fee fields. Print this report now or later.

Database Structure Entry Form

Field Name	Data Type	Width

Name: _____

Examination Number: _____

Date: _____