



A query is used to obtain information from Marywood's iSeries database. You use a query to select, arrange and analyze information stored in one or more database files in order to produce a report. Database files are defined and created by the system and its users. User-created files are generally saved in one's own library (ATUSLIB, for example). System database files are stored in DATALIBR.

Accessing Query on the iSeries

1. Sign on to the iSeries (Administrative Computing).
2. Tap the **F8** key (Query/IDDU).

F8=Query/IDDU

```

1. Work with Data Definitions. (IDDU)
2. Work with Data Dictionaries. (IDDU)
3. Work with Database Files. (IDDU)
4. Work with Queries.
5. Work with Database Files.

```

3. Choose Option #4 (*Work with Queries*) if you want to work with (write, edit, run) a query.

Creating a Query

1. On the *Work with Queries* screen, type Option number **1** (Create) on the top line.
2. On the second line, type a name for your query.
3. On the last line, type the name of your library.

NOTE: If you do not know the name of your library, take the number off of your User ID (last two characters) and replace it with LIB (for example, ATUS02 becomes ATUSLIB).

```

Option . . . . . 1

Query . . . . . DUNMORE
Library . . . . . ATUSLIB

```

4. Tap the **Enter** key.



Query Definitions

The file (or files) that a query uses to get the information and what is to be done with that information are defined and stored in a query definition (*Define the Query*) screen. Here you will follow a sequence of displays that guide you through the process of using the files in the ways you specify and to produce the results that you need.

Eleven options are listed on the *Define the Query* screen. You do not have to select all of these options when creating a query, only those that you need. However, you must always choose and begin with the *Specify file selections* option.

Specify File Selections

1. Type the number **1** (*Select*) on the line in front of the first option, *Specify file selections*. This option is used to specify the file (or files) from which you want your query to obtain information. If you specify more than one file, you are shown additional displays on how you want the files joined.
2. Tap the **Enter** key.

```

Opt  Query Definition Option
  1  Specify file selections
    Define result fields
    -  Select and sequence fields
    -  Select records
    -  Select sort fields
    -  Select collating sequence
    -  Specify report column formatting
    -  Select report summary functions
    -  Define report breaks
    -  Select output type and output form
    -  Specify processing options

```

3. Type the name of the file on the first line.
4. Type the name of the library where the file is stored on the second line.

```

File . . . . . STUPMAST
Library . . . . . DATALIBR
Member . . . . . *FIRST
Format . . . . . *FIRST

```

5. Tap the **Enter** key.

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Use the iSeries: Writing Queries

Select and Sequence Fields

This option is used to select the fields from your selected file(s) that you want to appear on your report. You also will specify the order you want them to appear, left to right.

1. Type the number **1** (*Select*) on the line in front of *Select and sequence fields*.
2. Tap the **Enter** key.
3. This screen lists all of the fields (field names) in the file(s) along with a Text description. You can tap the **Page Down** key to browse through them all. The third column lists the length of the field (if it is a text field) and the fourth column lists the decimal places (if it is a number field).
4. Locate the first field you want to display in the query. Begin the numbering process by typing the number **10** on the line in front of it (we recommend 10, 20, 30, etc. for ease of insertion between fields).
5. Locate the next field you want to display in the query. Type the number **20** on the line in front of it. Continue locating fields and numbering.

Seq	Field	Text
_____	STSS	STUDENT IDENTIFICATION NUMB
<u>10</u>	STSNAM	STUDENT SORT NAME
_____	STGNDR	STUDENT GENDER
_____	STDOB	STUDENT DATE OF BIRTH
<u>20</u>	STADR	STUDENT'S HOME ADDRESS
<u>30</u>	STCITY	STUDENT'S CITY
<u>40</u>	STSTAT	STUDENT'S ST
<u>50</u>	STZIP	STUDENT'S ZIP CODE
<u>60</u>	STPHNM	STUDENT'S HOME PHONE NUMBER
_____	STLDAT	DATE OF LAST MAINTENANCE
_____	STFSTS	DEFAULT FINANCIAL HOLD STATUS
_____	STVRFY	VERIFICATION

6. Tap the **Enter** key when finished. Tap the **Enter** key a second time to return to the *Define the Query* screen.

Select Records

If you only want particular records to be included in your report, this option allows you to specify the criteria that must be satisfied.

1. Type the number **1** (*Select*) on the line in front of *Select Records*.
2. Tap the **Enter** key.
3. This screen lists fields you can use (bottom of the screen) and asks you to specify your comparisons (top of the screen).

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Use the iSeries: Writing Queries

AND/OR	Field	Test	Value (Field, Number, 'Characters')
	STCITY	EQ	'Dunmore'

- Specify your comparison by typing the name of the *Field*, the *Test*, and the *Value*. NOTE: Text field values must be surrounded by quotes. Also, any additional comparisons must be preceded by the word *And* or *Or* starting with the second comparison.
- Tap the **Enter** key.

Select Sort Fields

Use this option to specify what field(s) to sort on so that your output records appear in a particular order (such as alphabetically or in descending order).

- Type the number **1** (*Select*) on the line in front of *Select sort fields*.
- Tap the **Enter** key.
- On the Select Sort Fields display, select the sort fields that you want by entering a sort priority number on the line in front of the field. Begin by typing the number **10**. (Using 10, 20, 30, 40 will allow you to easily add another sort field later if you wish.)
- You can also specify how you want the field to be sorted (ascending or descending) by typing the letter **A** or **D** on the line in the second column.

Sort	Prt	A/D	Field	Text
10		A	STSNAM	STUDENT SORT NAME
			STADR	STUDENT'S HOME ADDRESS
			STCITY	STUDENT'S CITY
			STSTAT	STUDENT'S ST
			STZIP	STUDENT'S ZIP CODE
			STPHNM	STUDENT'S HOME PHONE NUMBER

- Tap the **Enter** key twice to return to the *Define the Query* screen.



Select Output Type and Output Form

This option allows you to select where you want your query output to go and in what form you want it to be. You can have the output displayed (default setting), printed, or put into a database file that can be imported into Microsoft Excel (recommended action).

1. Type the number **1** (*Select*) on the line in front of *Select output type and output form*.
2. Tap the **Enter** key.
3. On the Select Output Type and Output Form display, type the number **3** (*Database file*) on the first line (*Output type*). Leave all other settings as is.

```

Output type . . . . . 3      1=Display
                               2=Printer
                               3=Database file

Form of output . . . . . 1    1=Detail
                               2=Summary only

Line wrapping . . . . . N    Y=Yes, N=No
Wrapping width . . . . .    Blank, 1-378
Record on one page . . . . . N Y=Yes, N=No
  
```

4. Tap the **Enter** key.
5. On the Display Database File Output display, enter the following recommended settings:
 - a. Type the name of the query on the first line (*File*)—it will also become the name of the database file that will be created
 - b. Type the name of your *library* on the second line
 - c. Change the setting for *Data in file* to the number **2** (*Replace file*) so each time you run the query the database file will be updated
 - d. Type a *text* description of the file to identify it

```

File . . . . . DUNMORE      Name, F4 for list
Library . . . . . ATUSLIB    Name, F4 for list
Member . . . . . *FILE      Name, *FIRST, *FILE, *ALL,
                               F4 for list
Data in file . . . . . 2      1=New file, 2=Replace file
                               3=New member, 4=Replace member
                               5=Add to member

For a new file:
Authority . . . . . *LIBCRTAUT *LIBCRTAUT, authorization list
                               *CHANGE, *ALL, *EXCLUDE, *USE

Text . . . . . Marywood students from Dunmore
Print definition . . . . . N Y=Yes, N=No
  
```

6. Tap the **Enter** key to return to the *Define the Query* screen.

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Use the iSeries: Writing Queries

Viewing the Report

You can view the results of the report on the screen any time before you exit and/or run the query.

1. Tap the **F5** (*Report*) key.
2. Tapping the **Page Down** key allows you to scroll down the report.
3. Click the **F20** (Right) button to move to the right of the report.
4. Tap the **F12** (*Cancel*) key to return to the *Define the Query* screen.

Saving and Running the Query

1. Tap the **F3** (Exit) key.
2. On the Exit this Query screen, type the letter **Y** on the first line (*Save definition*).
3. Type the number **1** on the second line (*Run option*).
4. Type a *Text* description of the query to identify it.

```

Exit this Query

Type choices, press Enter.

Save definition . . . . . Y           Y=Yes, N=No
Run option . . . . . 1             1=Run interactively
                                   2=Run in batch
                                   3=Do not run

For a saved definition:
Query . . . . . DUNMORE           Name
Library . . . . . ATUSLIB         Name, F4 for list

Text . . . . . Marywood students from Dunmore
Authority . . . . . *CHANGE       *LIBCRTAUT, authorization list
                                   *CHANGE, *ALL, *EXCLUDE, *USE

```

5. Tap the **Enter** key.
6. You will receive a message at the bottom of the screen which reads “File DUNMORE in ATUSLIB was created (replaced).”
7. The file can now be transferred into Microsoft Excel.



Viewing a List of Queries in Your Library

1. Sign on to the iSeries (Administrative Computing).
2. Tap the **F8** key (Query/IDDU).
3. Choose Option #4 (*Work with Queries*).
4. Type the number “2” on the top line (edit) and with your cursor on the second line, tap the **F4** key (list). Make sure your library is listed on the third line.

```

Work with Queries

Type choices, press Enter.

Option . . . . . 2          1=Create, 2=Change, 3=Copy, 4=Delete
                             5=Display, 6=Print definition
                             8=Run in batch, 9=Run
Query . . . . . _____ Name, F4 for list
Library . . . . . ATUSLIB  Name, *LIBL, F4 for list

```

5. You can use the **Page Down** key to scroll through ALL of the queries in your library.
6. Type the number “2” in front of a query to edit it and you will be taken to the “Define the Query” screen for that particular query.

Adding Additional Files to a Query

If the file you are querying does not contain the fields you need, additional files will have to be added to the query. You cannot use an additional file unless the files have a common field. This field does not have to be labeled with the same name. However, it must contain the same (identical) information.

1. On the Define the Query screen, type the number “1” in front of “Specify file selections.” Tap the **Enter** key.
2. Tap **F9** to add an area for information from the second file.
3. Type the name of the second file and the library (on the first two lines).

```

File . . . . . admpethn
Library . . . . . DATALIB
Member . . . . . *FIRST
Format . . . . . *FIRST
File ID . . . . . *ID

```

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Use the iSeries: Writing Queries

4. Tap **Enter** twice.
5. You will be taken to the Specify Type of Join screen. Most of the time you will use option 2, “Matched records with primary file.” Type the number “2” and then tap the **Enter** key.
6. On the Specify How to Join Files screen, you will relate the two files by their common field. Type the name of the common field from the first file in the first Field column, then “EQ” in the Test column, and lastly, the name of the common field from the second file in the second Field column. Tap the **Enter** key.

Specify How to Join Files

Type comparisons to show how file selections are related, press Enter.
Tests: EQ, NE, LE, GE, LT, GT

Field	Test	Field
STSETH	EQ	ADETH

7. You will be returned to the Define the Query screen where you can now add additional fields to be displayed in the “Select and sequence fields” option.