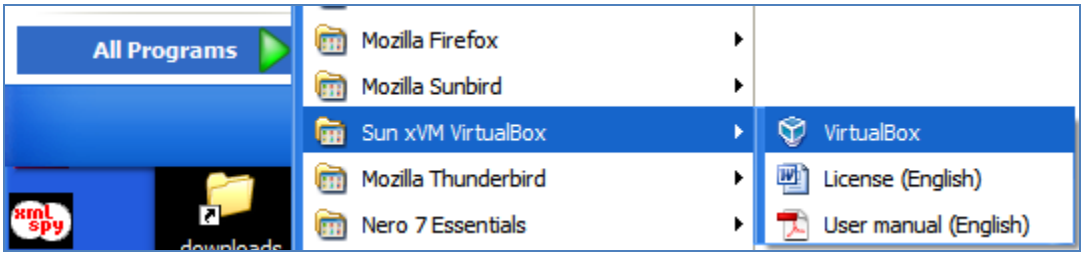
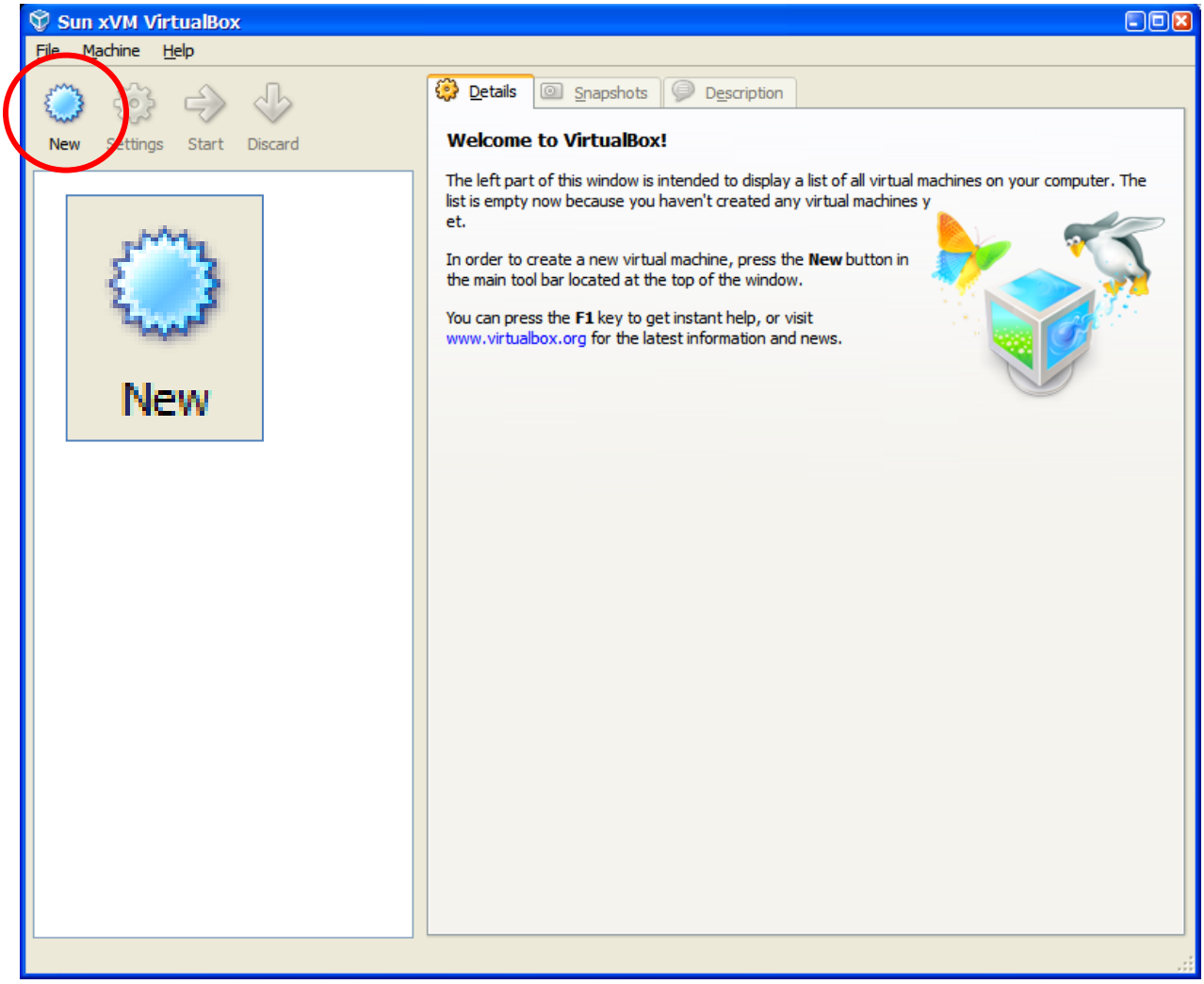
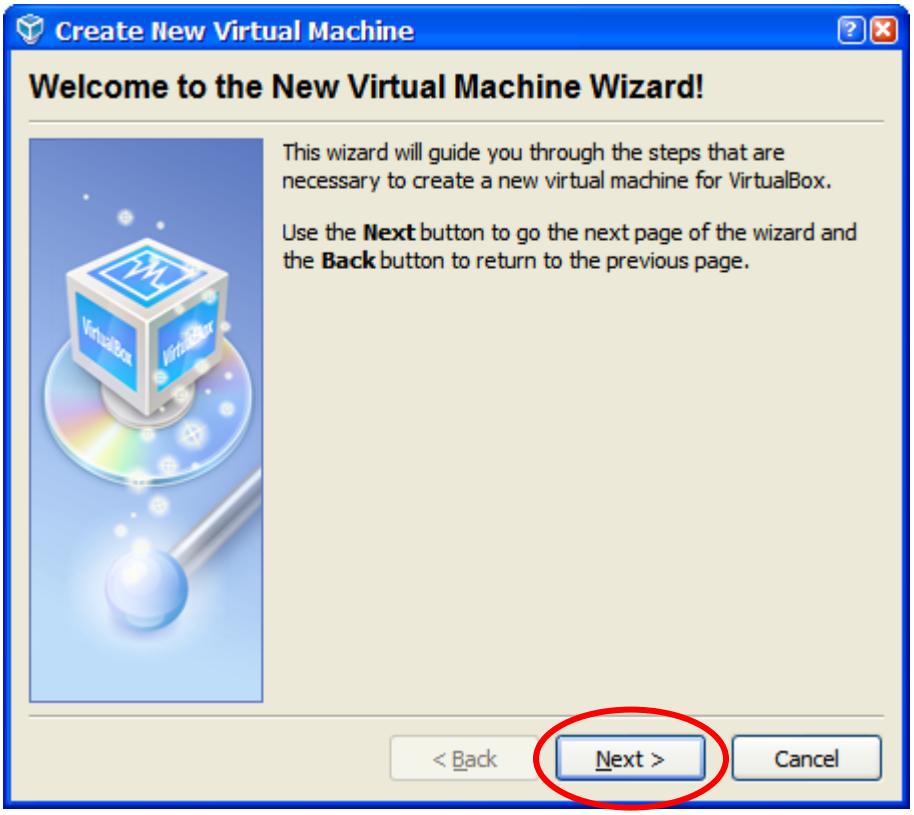
Start Virtual Box first.



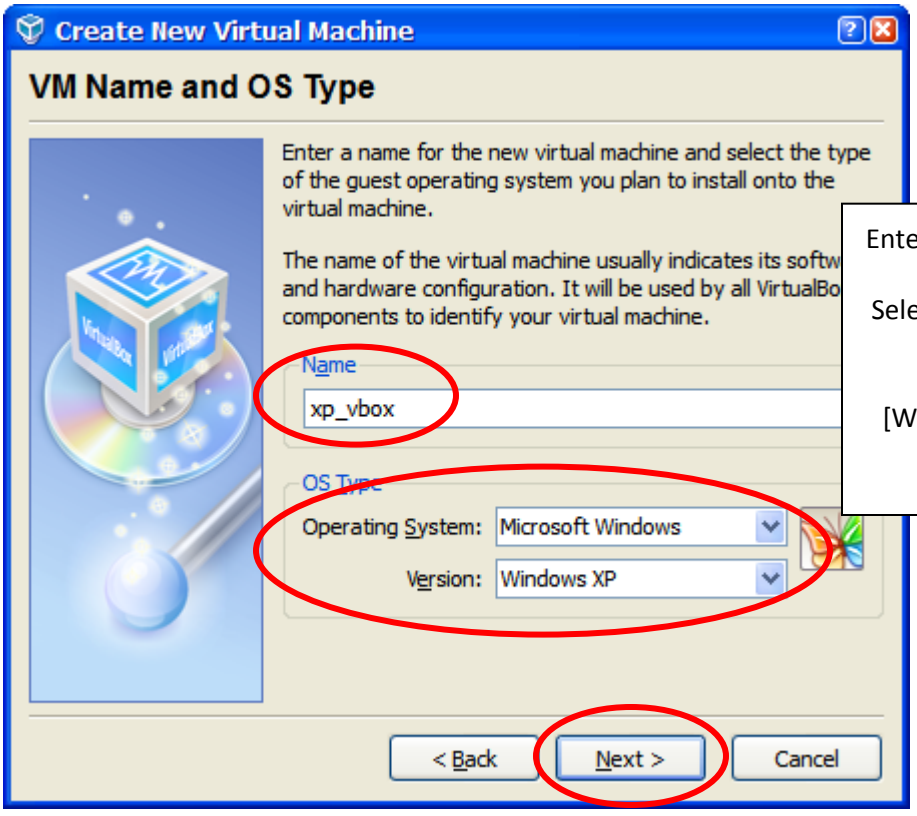
Select [Programs] ➔ [Sun xVM VirtualBox] ➔ [VirtualBox].



Create a new virtual machine. Click [New].
It is going to define some settings of the machine.



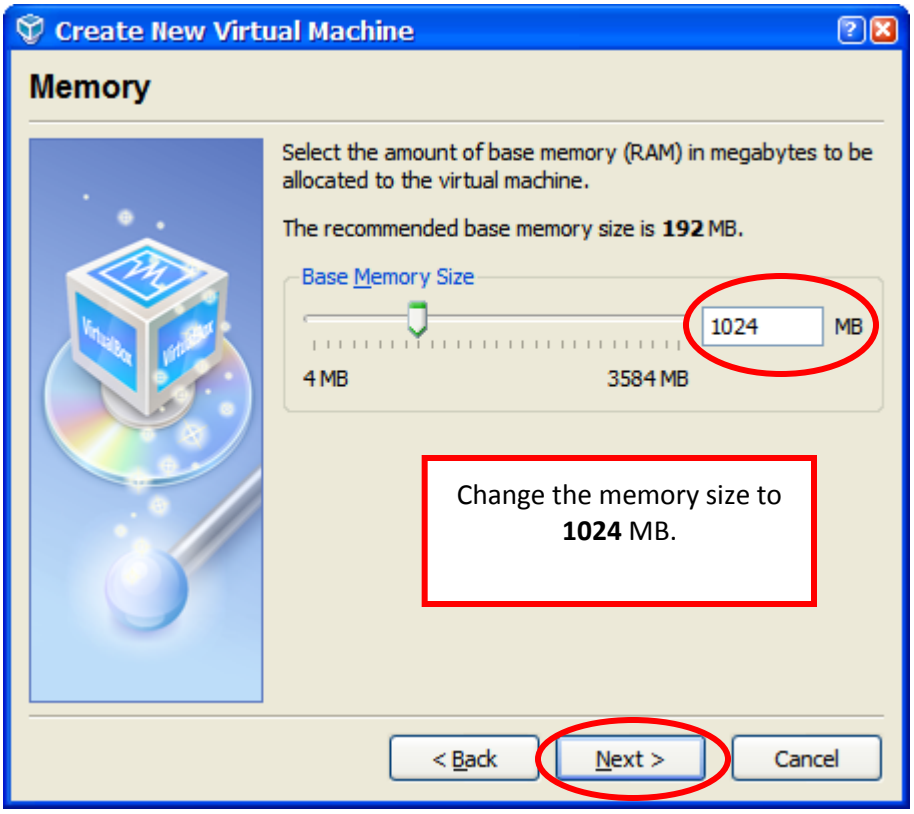
Click [Next]



Enter [xp_vbox] for [Name] box.

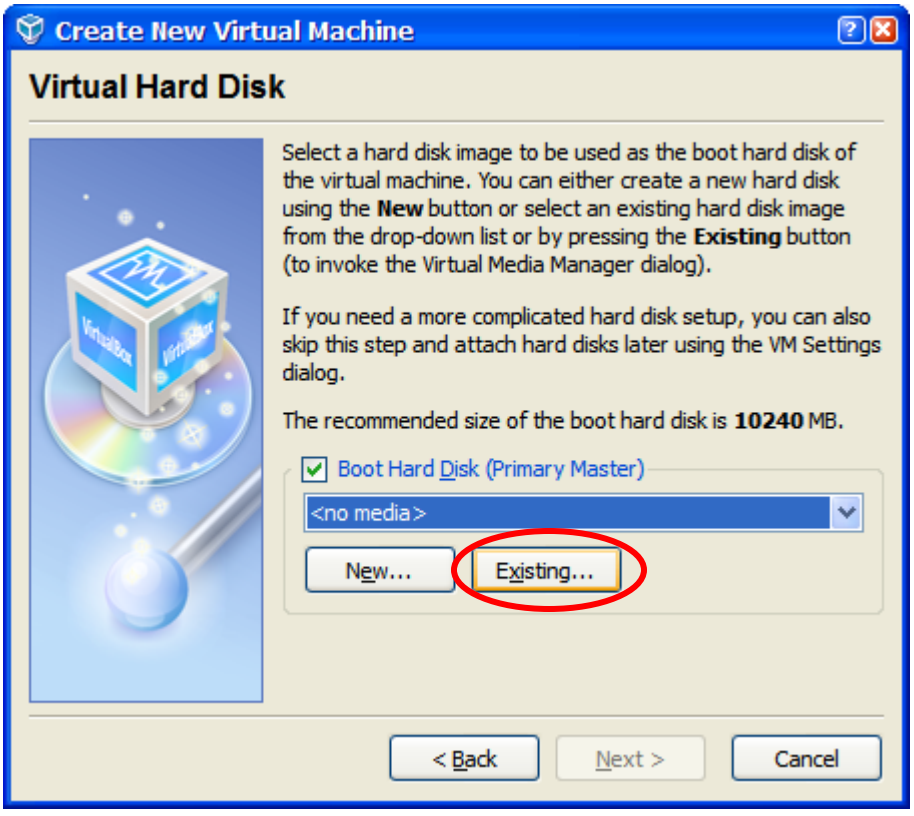
Select [Microsoft Windows] for Operating System
and
[Windows XP] as the Version.

Click [Next].



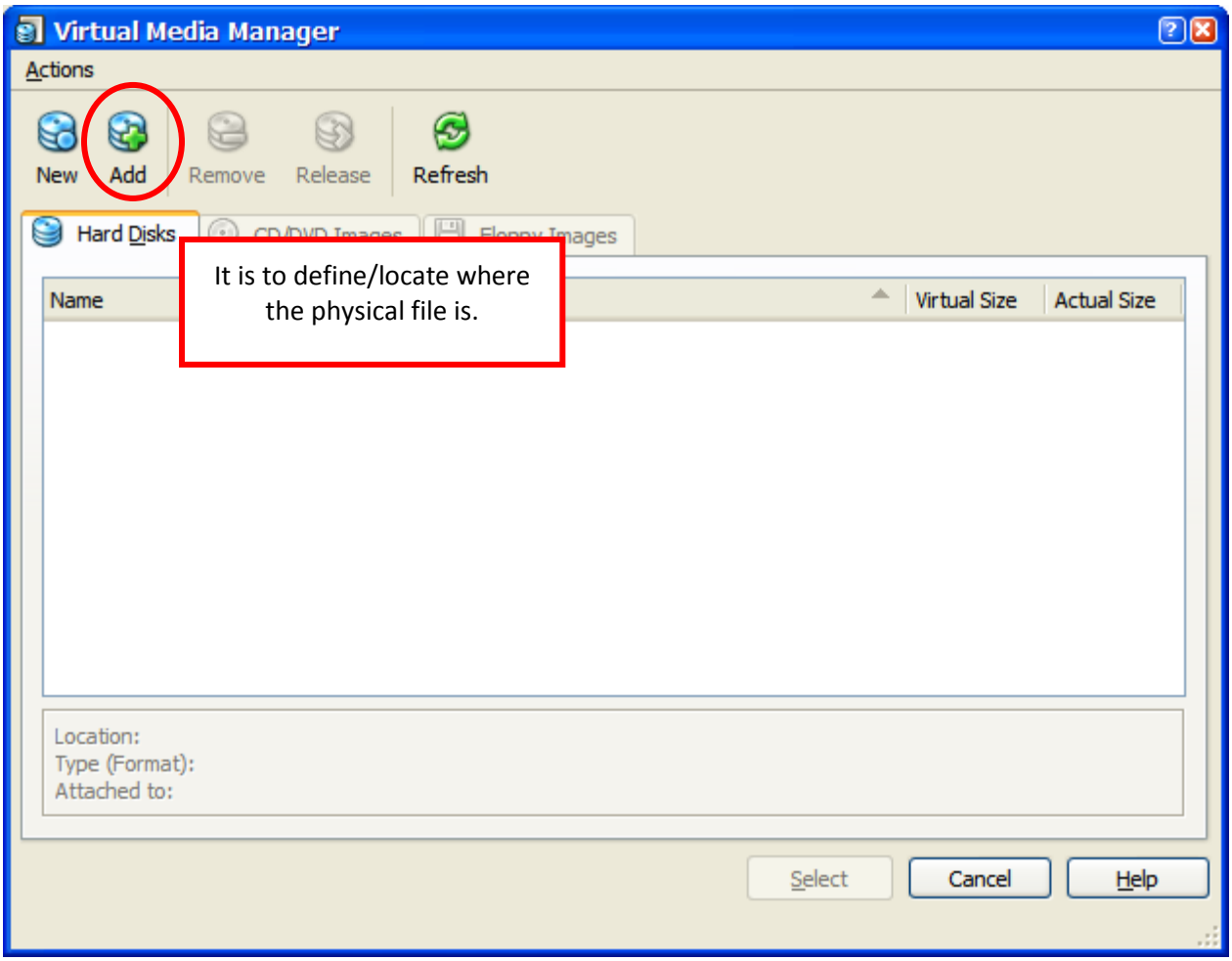
It is recommended to have at least ONE GB memory size to run the virtual machine. If you don't have sufficient memory, please try to upgrade it. If not, don't use it.

Click [Next].

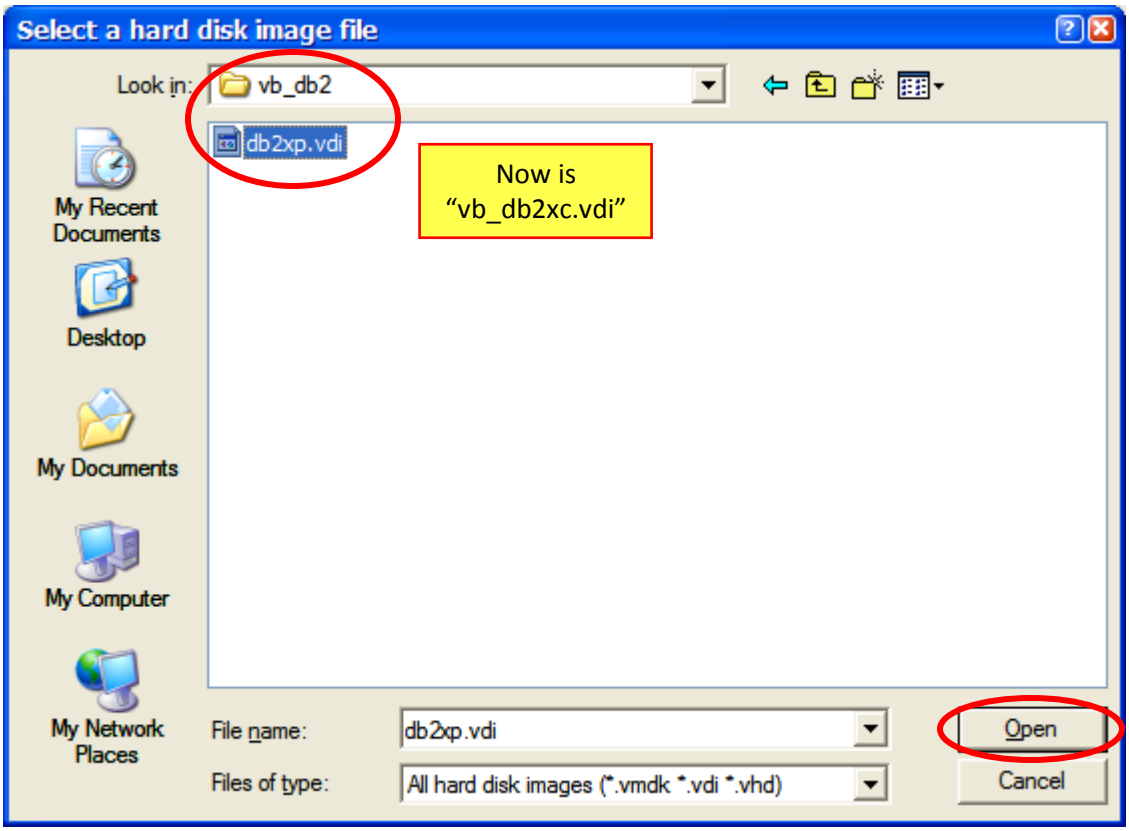


Here, we create or define the physical file storing the virtual machine.

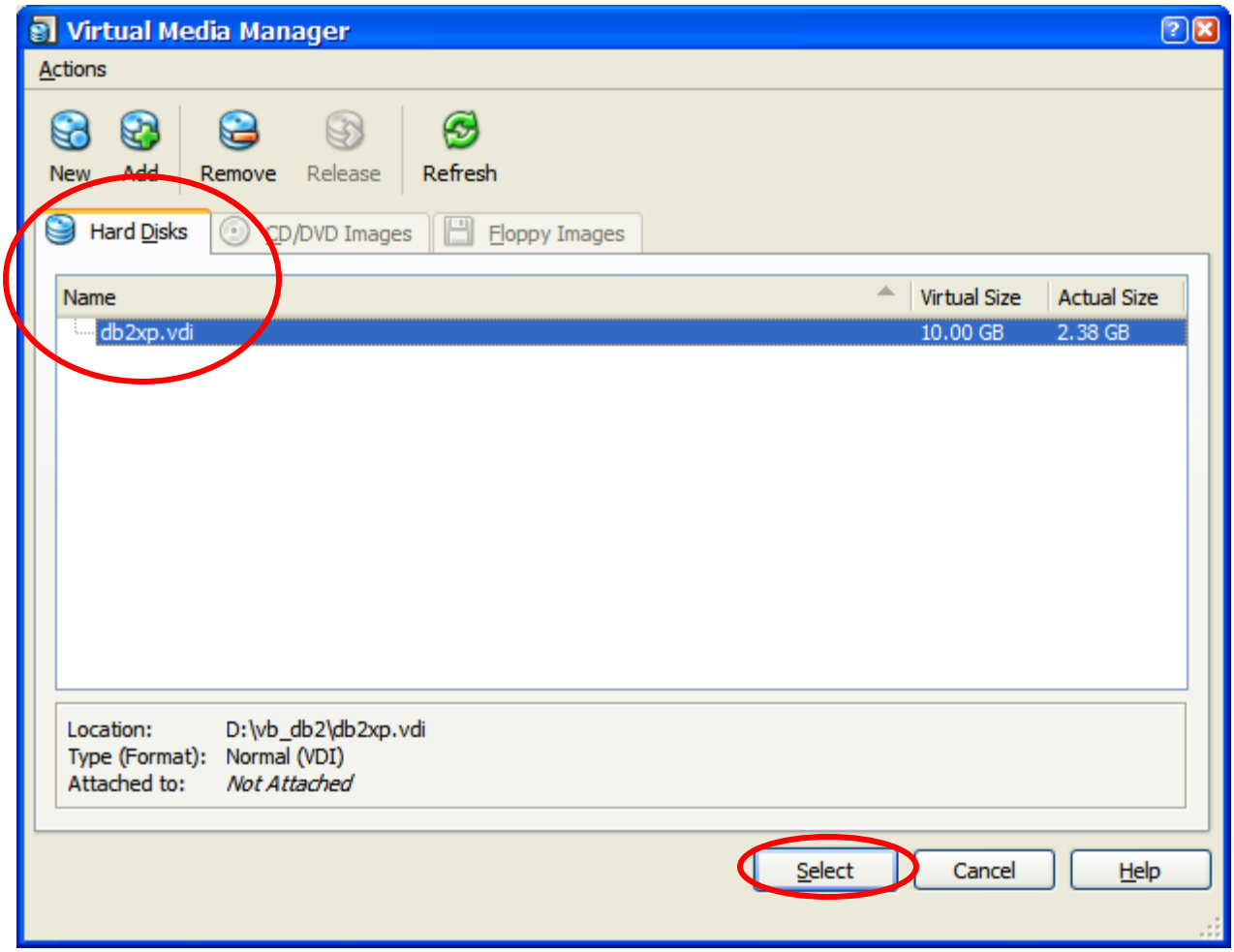
Click [Existing…].


Virtual Media Manager
Actions
New
Add
Remove
Release
Refresh
Hard Disks
CD/DVD Images
Floppy Images
It is to define/locate where the physical file is.
Name
Virtual Size
Actual Size
Location:
Type (Format):
Attached to:
Select
Cancel
Help

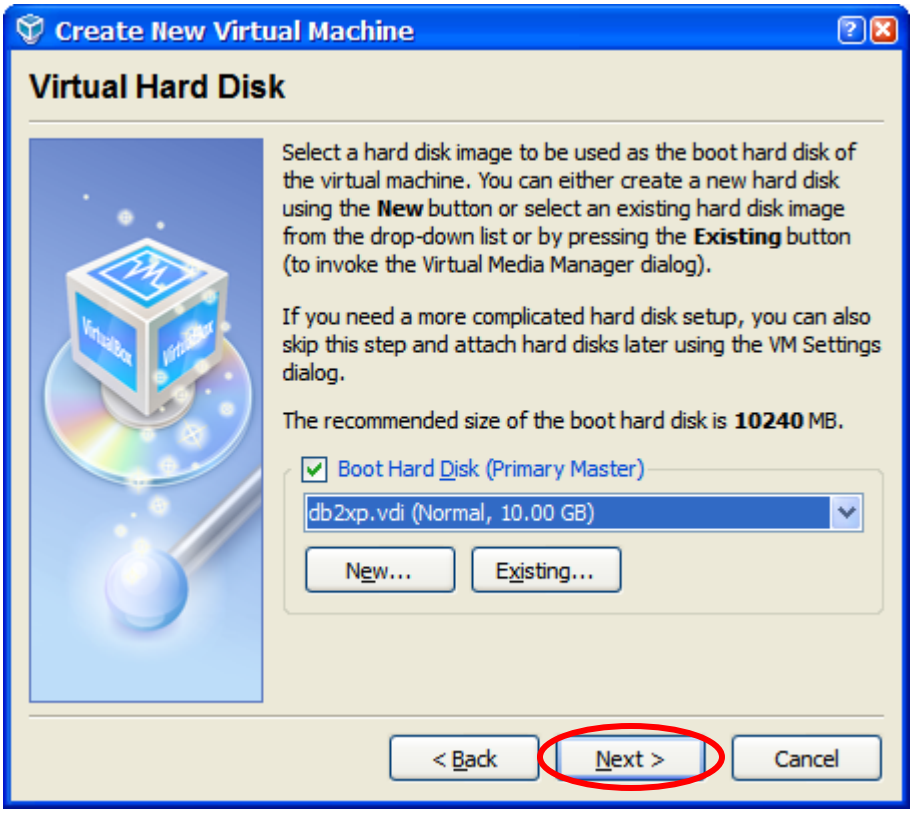
Click [Add].



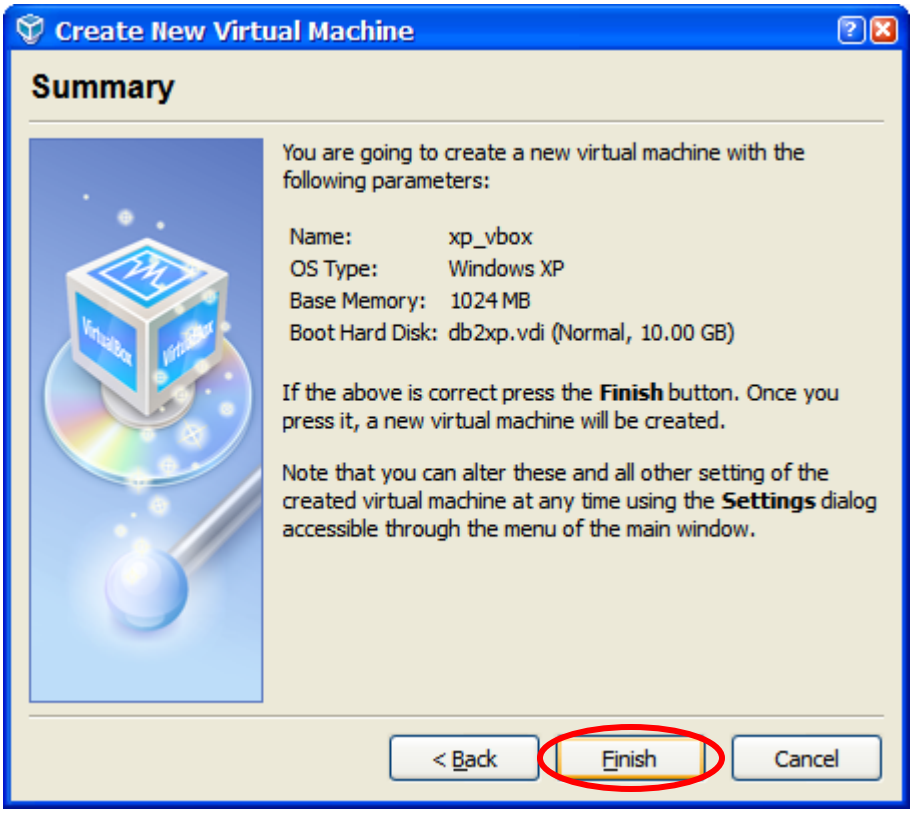
Locate where the [vdi] file is (location where you have copied the file). Click [Open].



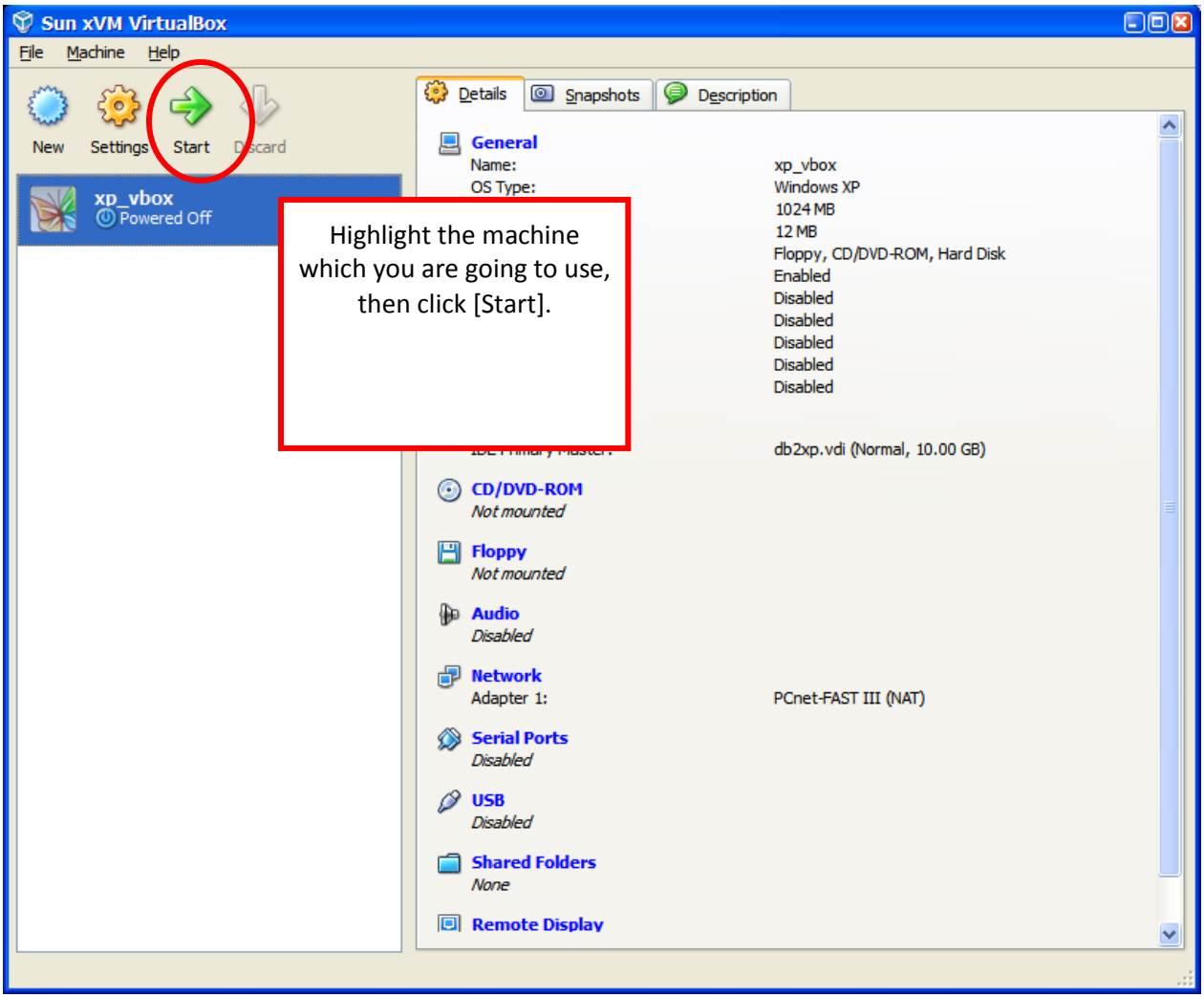
Click [Select].



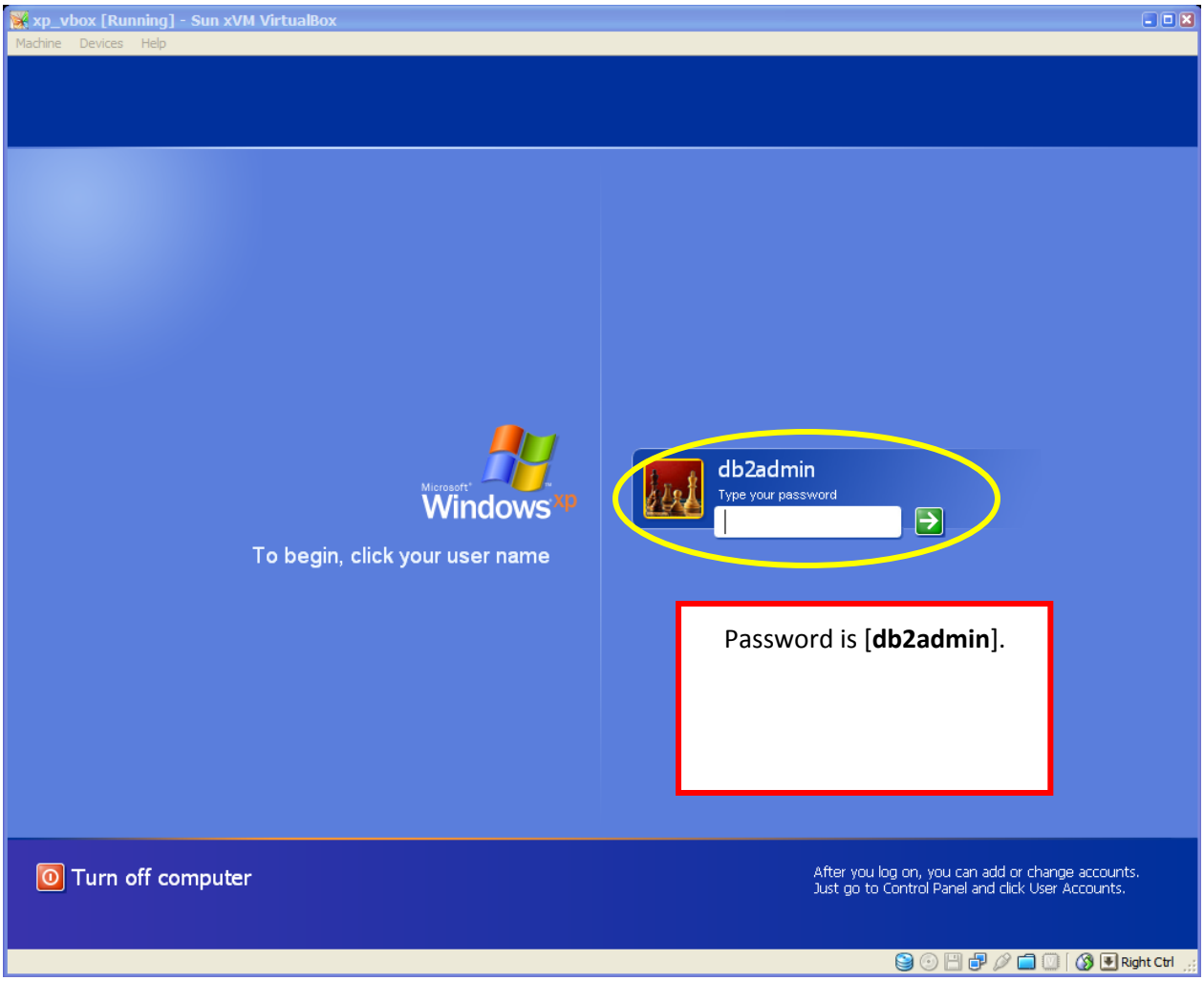
Click [Next].



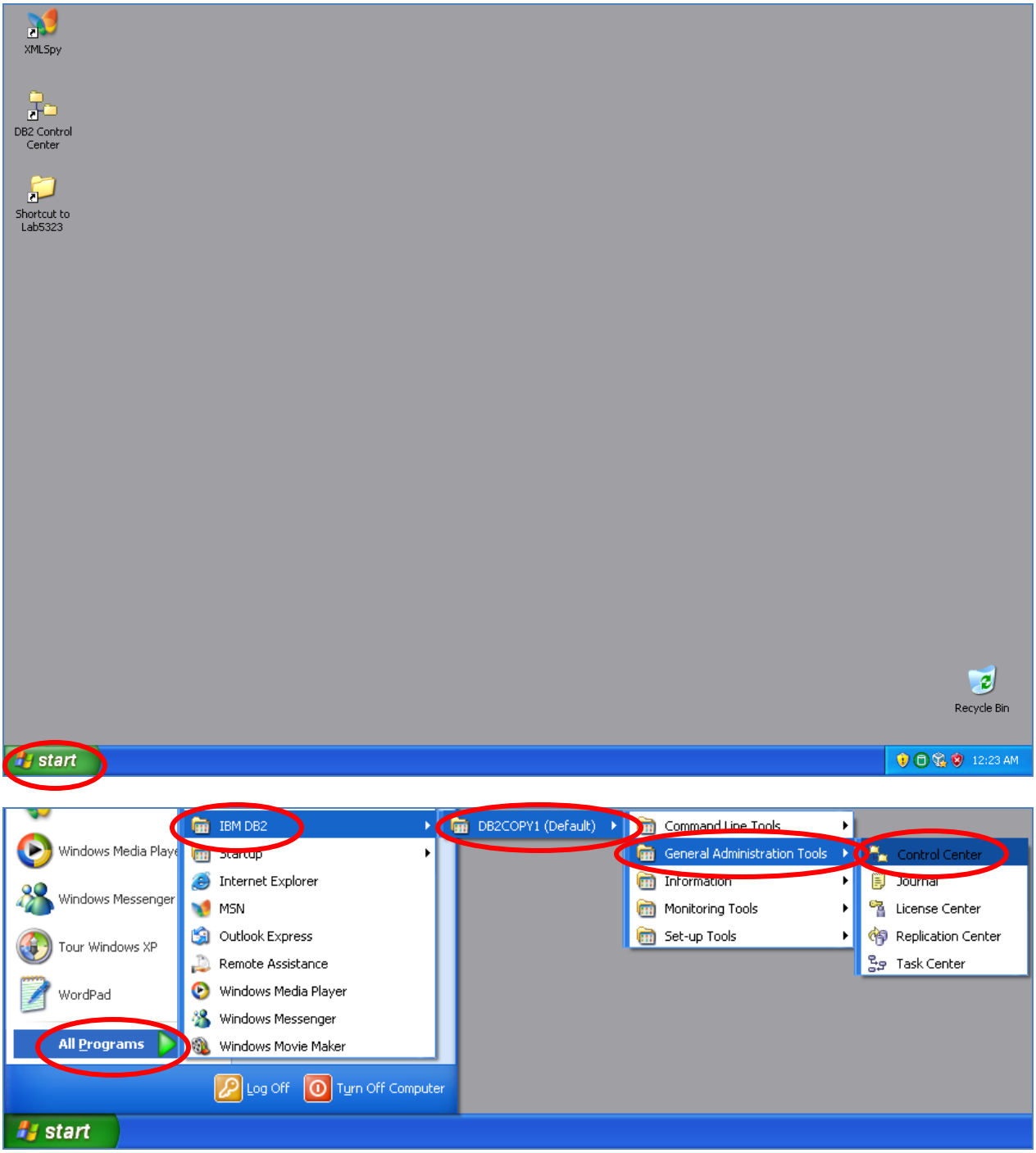
Click [Finish].



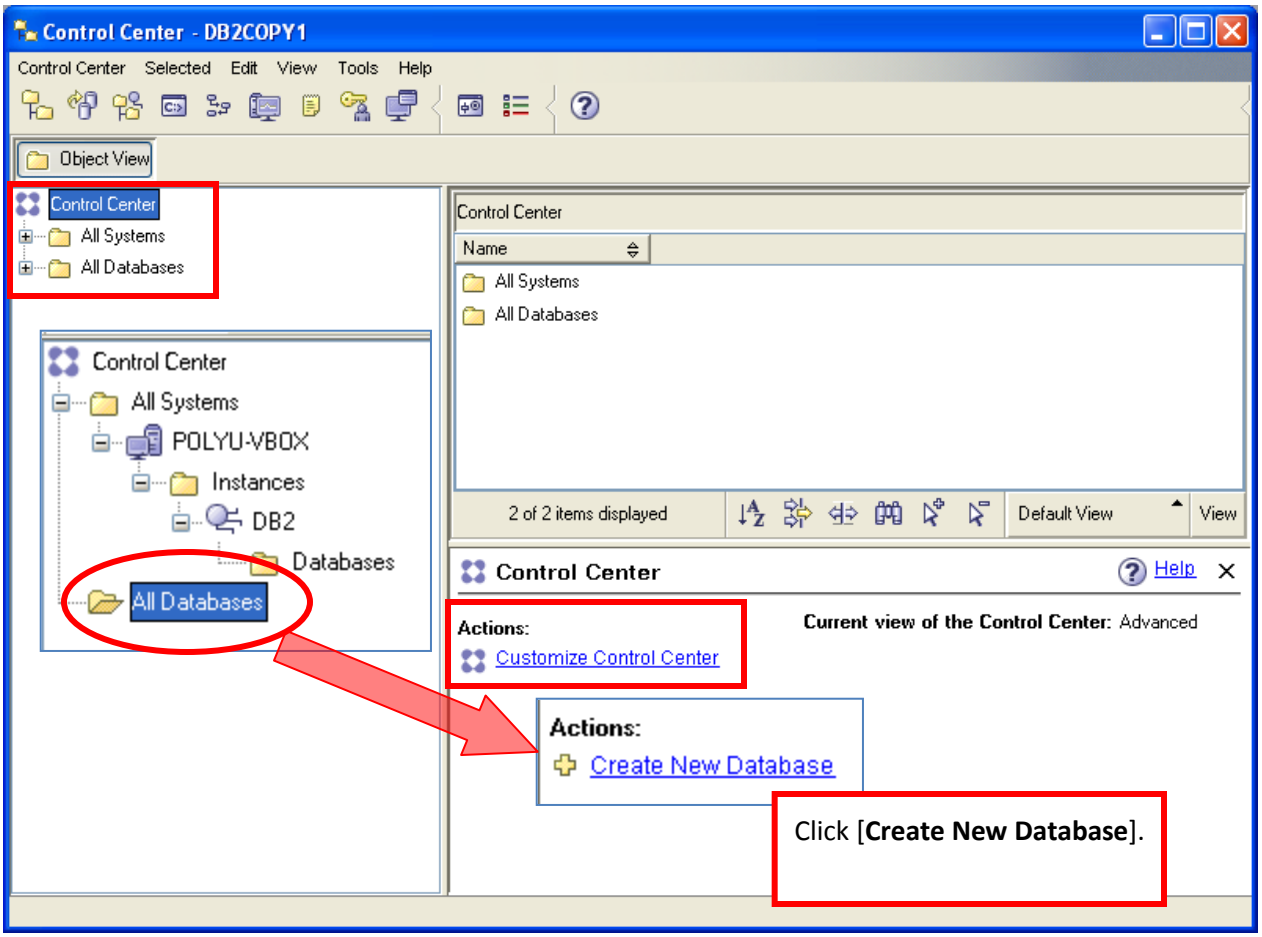
Now, it is ready to run the virtual machine. Simply click [Start], then you can use the virtual machine.



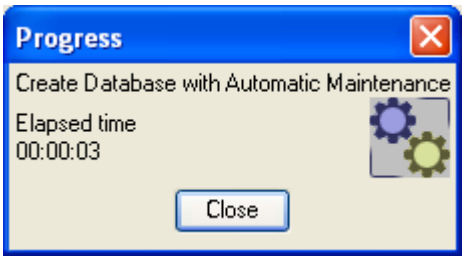
Enter the password, [db2admin] to start the machine.



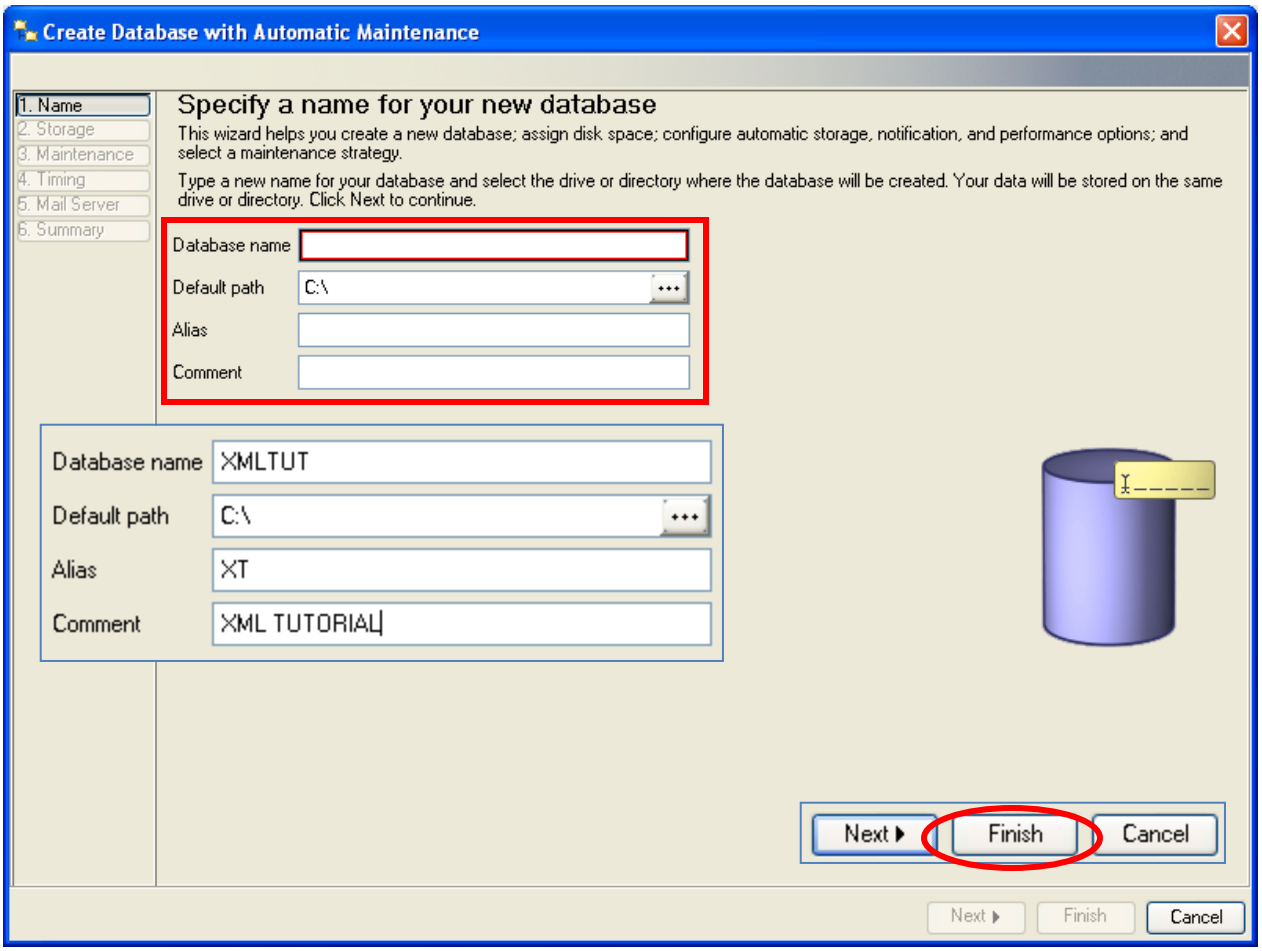
Select [Programs] ➔ [IBM DB2] ➔ [DB2COPY1 (Default)] ➔
➔ [General Administration Tools] ➔ [Control Center].



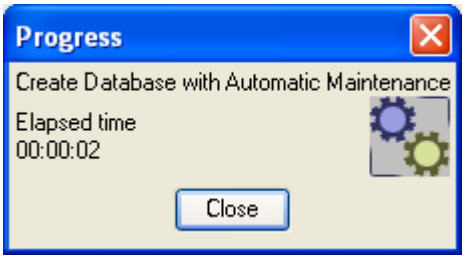
Well, we are now in the [Control Center]. Place the pointer on [All Databases], then in the [Actions:] box, [Customize Control Center] changes to [Create New Database]. Click on it to create our database.



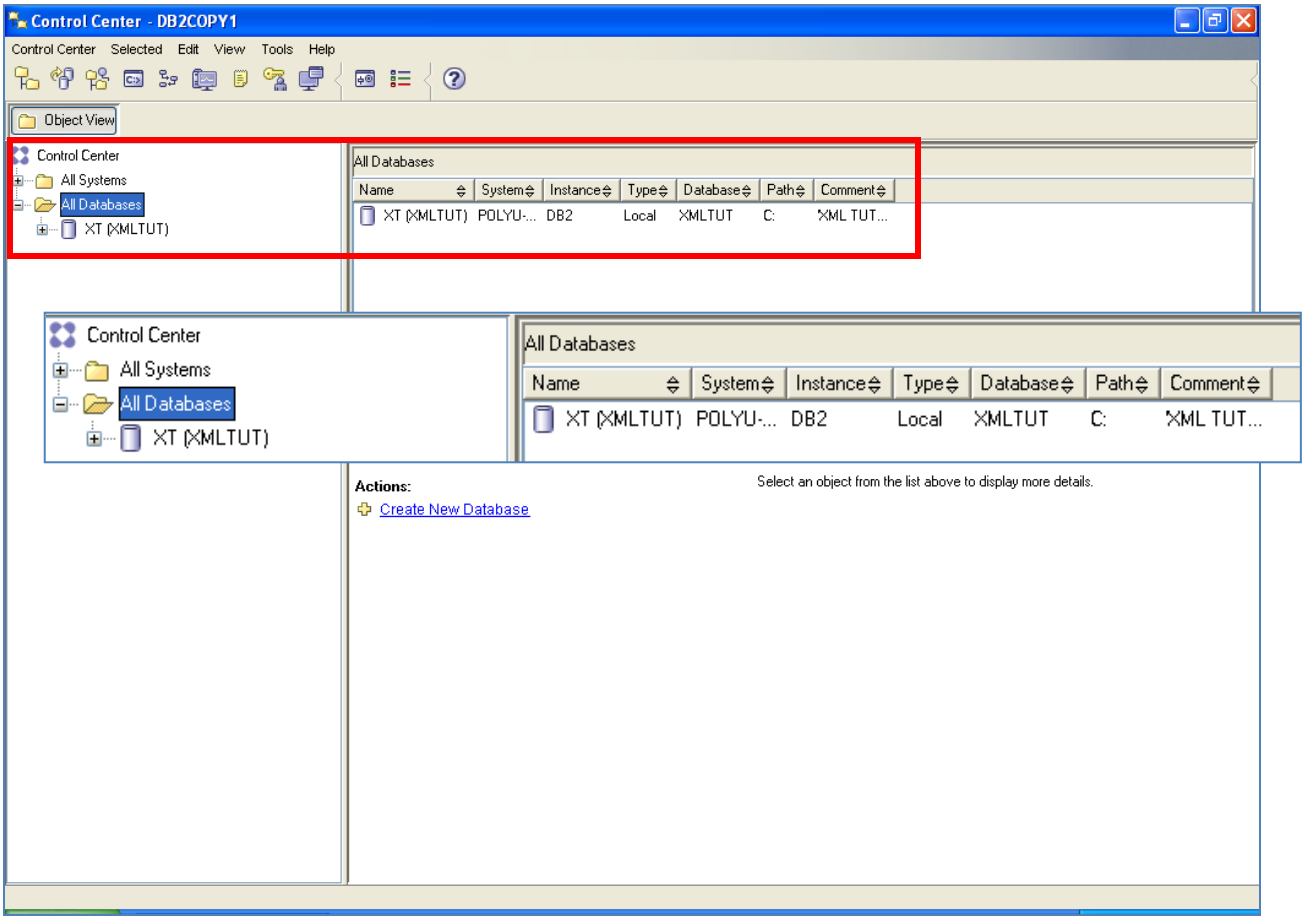
Creation of new database is being processed.



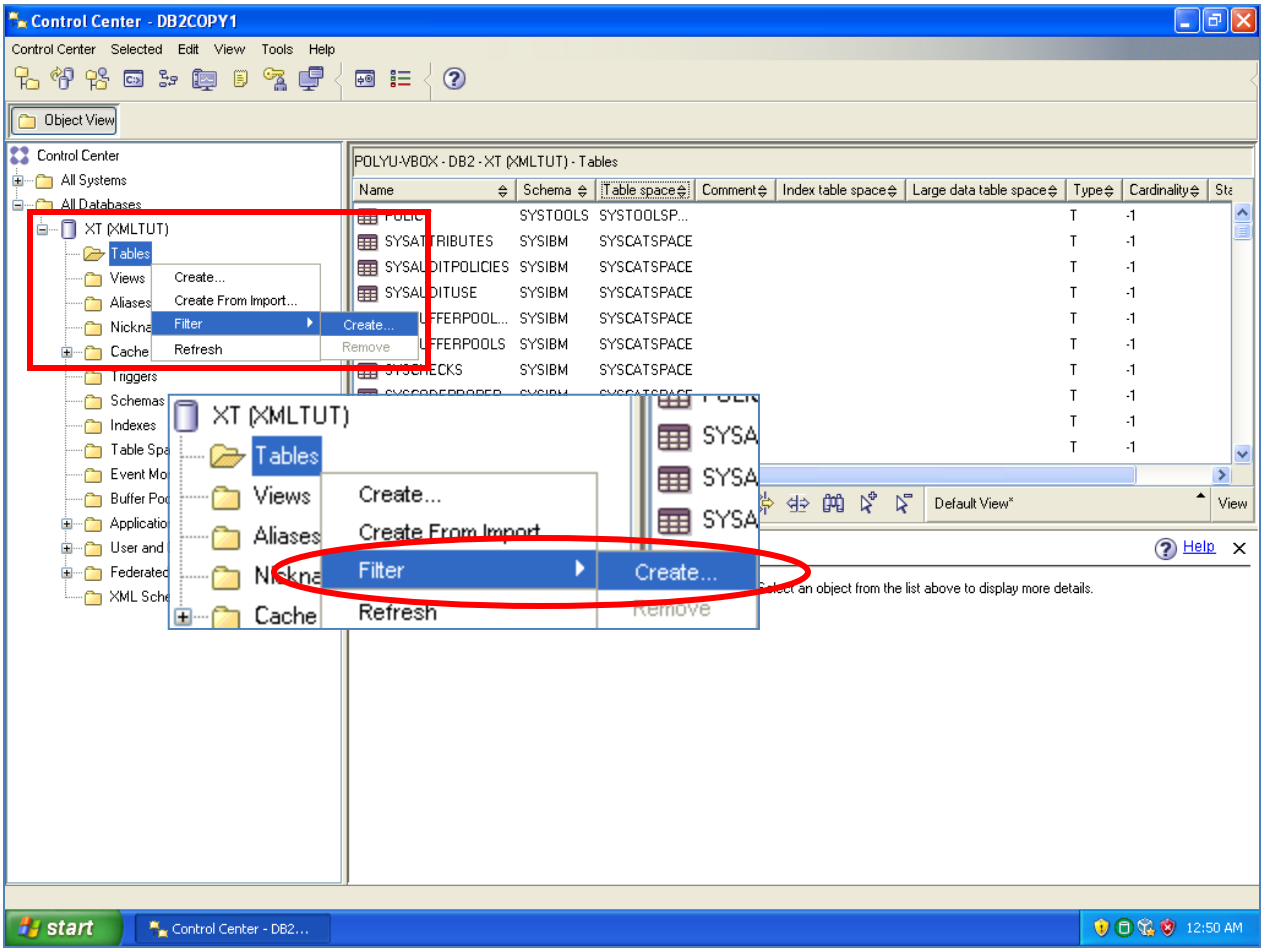
Enter details about the database as above then click [Finish].



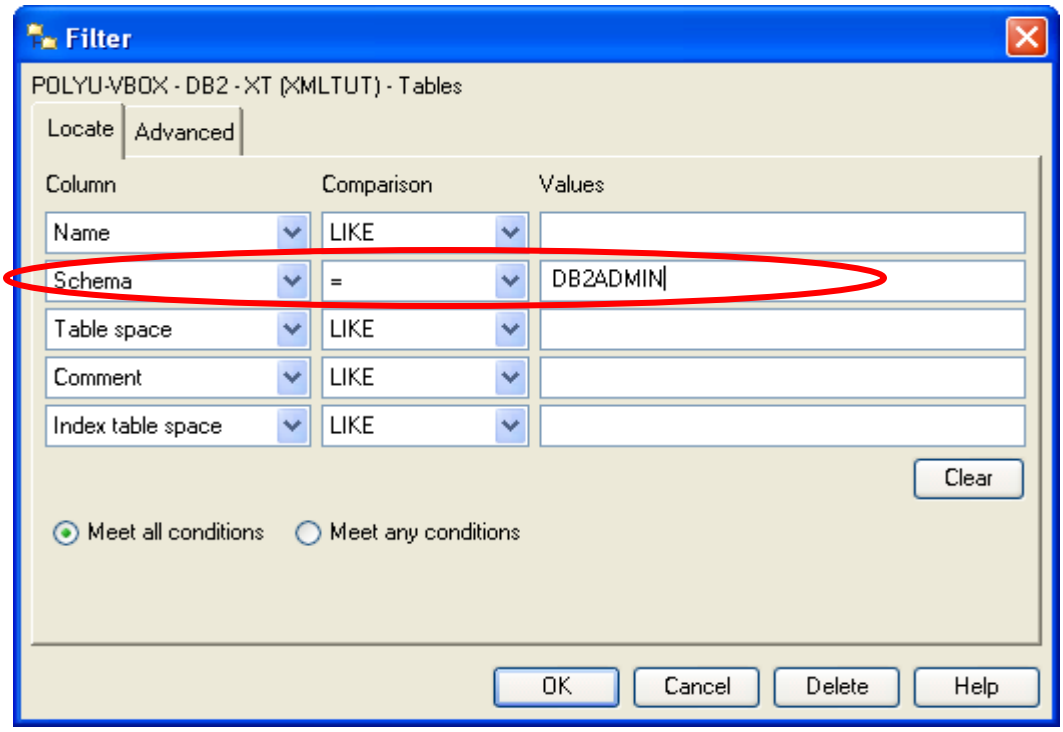
Finally, the database file is being created.



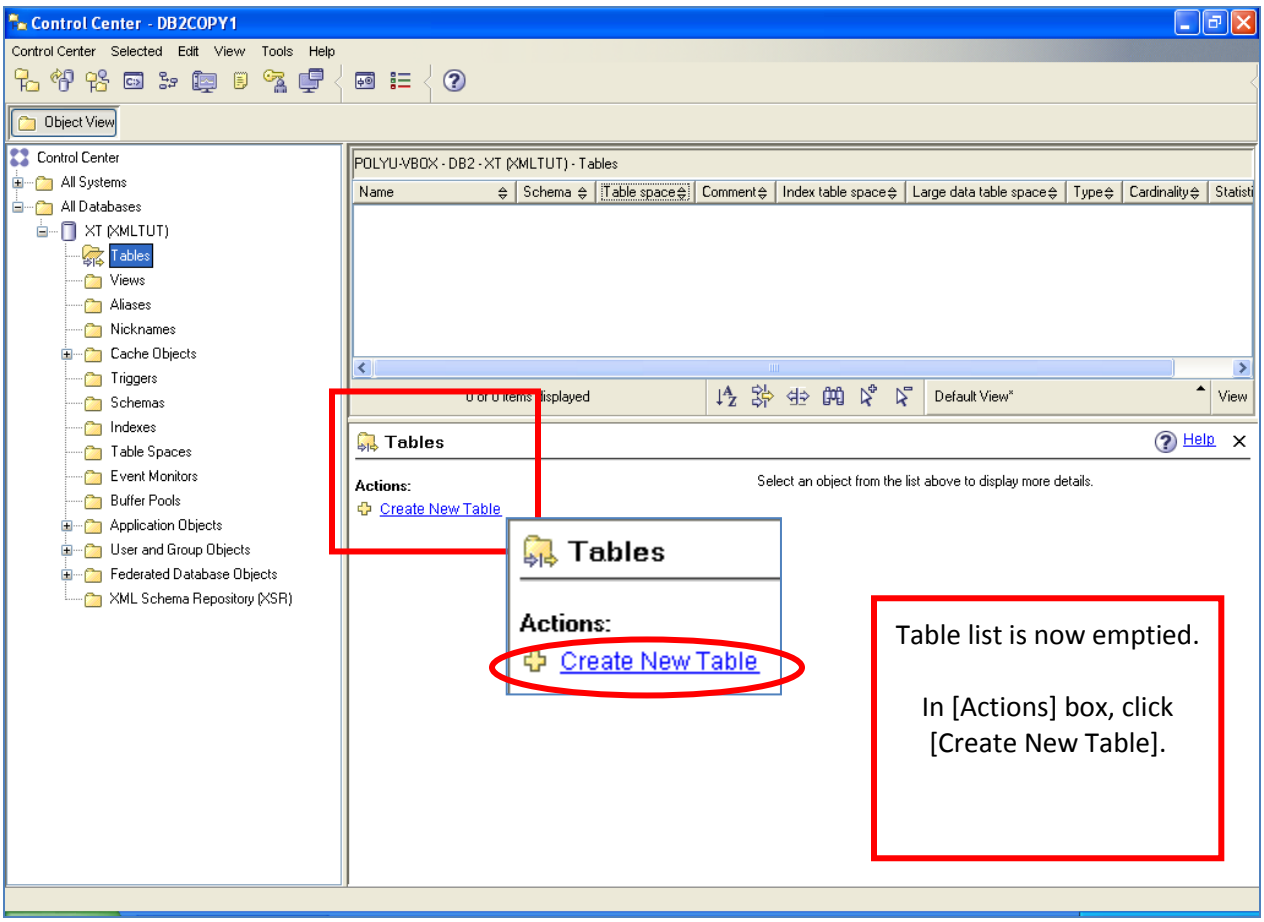
Now, you can see your database created.

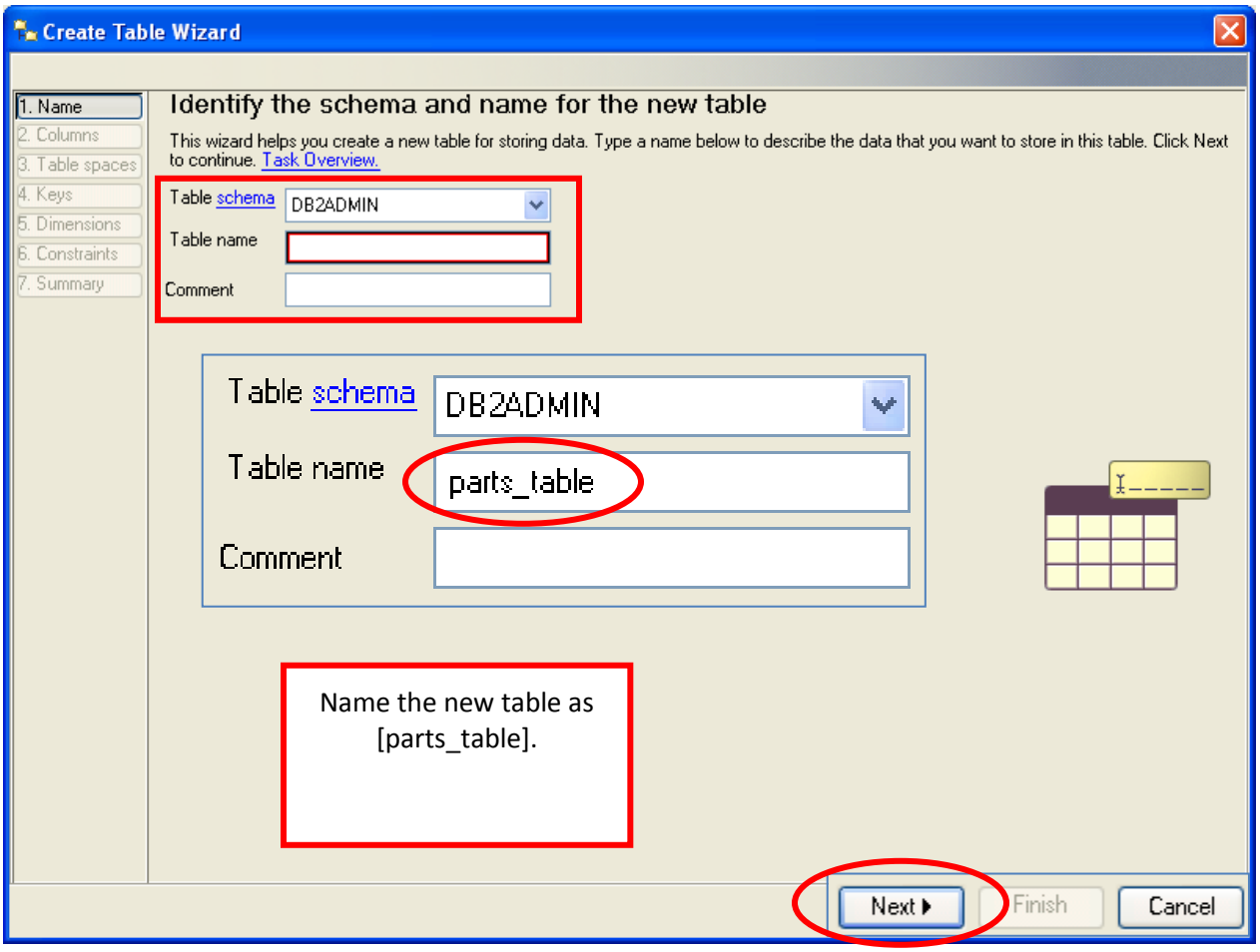


Expand the database, choose [Tables].
Right click on it and choose [Filter] ➔ [Create…].

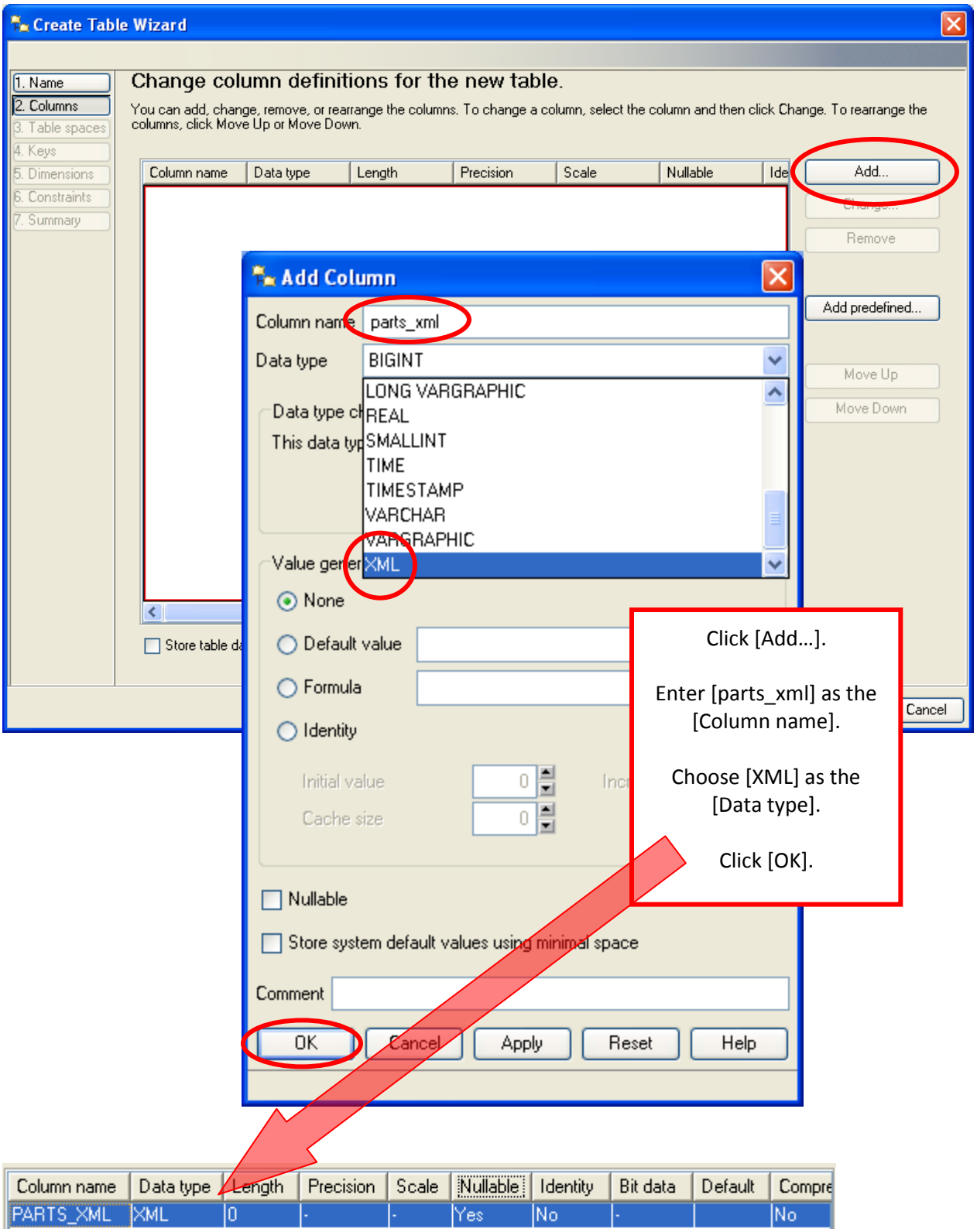


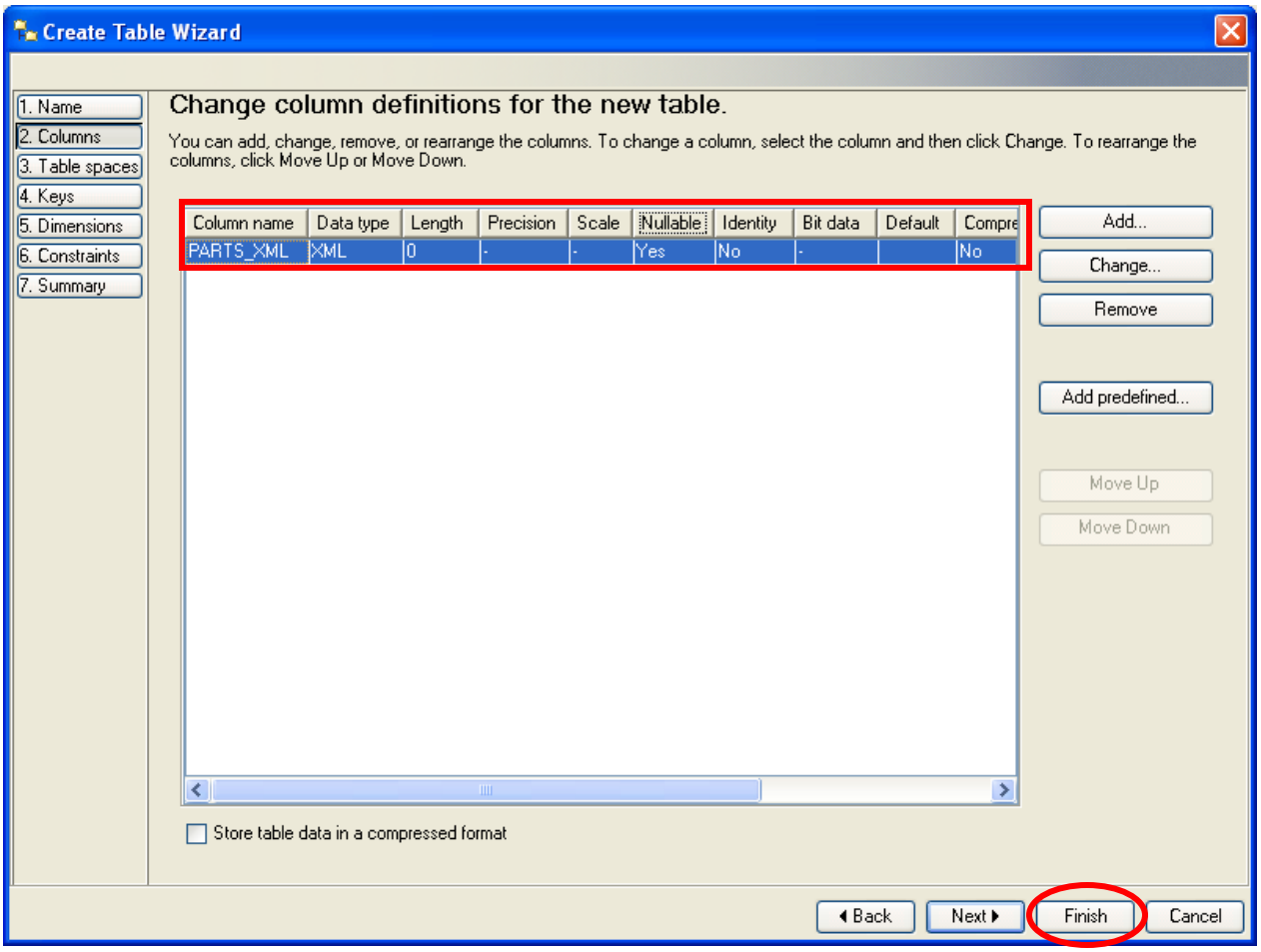
For [Schema], use [=] in [Comparison] and enter [db2admin] in the [Values] box.



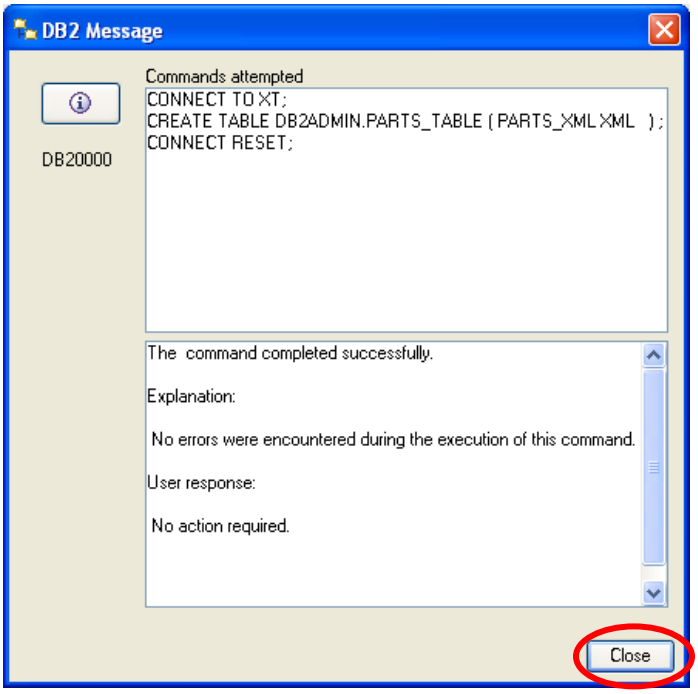

Create Table Wizard
1. Name
2. Columns
3. Table spaces
4. Keys
5. Dimensions
6. Constraints
7. Summary
Identify the schema and name for the new table
This wizard helps you create a new table for storing data. Type a name below to describe the data that you want to store in this table. Click Next to continue. Task Overview.
Table schema
DB2ADMIN
Table name
Comment
Table schema
DB2ADMIN
Table name
parts_table
Comment
Name the new table as [parts_table].
Next
Finish
Cancel

Click [Next].

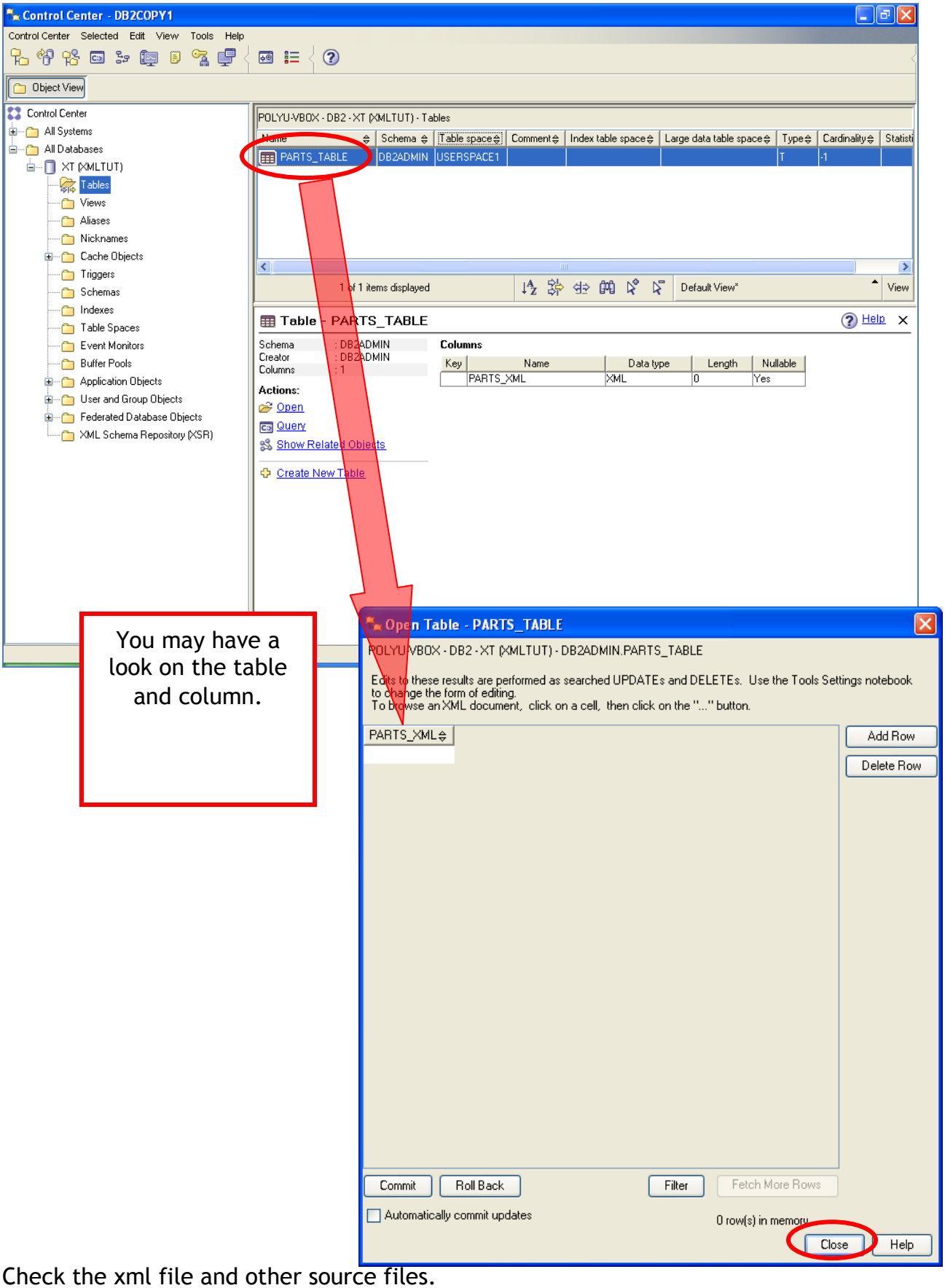

Create Table Wizard
1. Name
2. Columns
3. Table spaces
4. Keys
5. Dimensions
6. Constraints
7. Summary
Change column definitions for the new table.
You can add, change, remove, or rearrange the columns. To change a column, select the column and then click Change. To rearrange the columns, click Move Up or Move Down.
Column name
Data type
Length
Precision
Scale
Nullable
Add...
Remove
Add predefined...
Move Up
Move Down
Cancel
Add Column
Column name
parts_xml
Data type
BIGINT
LONG VARGRAPHIC
REAL
SMALLINT
TIME
TIMESTAMP
VARCHAR
VARGRAPHIC
XML
None
Default value
Formula
Identity
Initial value
Cache size
Nullable
Store system default values using minimal space
Comment
OK
Cancel
Apply
Reset
Help
Click [Add...].
Enter [parts_xml] as the [Column name].
Choose [XML] as the [Data type].
Click [OK].
Column name
Data type
Length
Precision
Scale
Nullable
Identity
Bit data
Default
Compre
PARTS_XML
XML
0
-
-
Yes
No
-
No



Click [Finish].

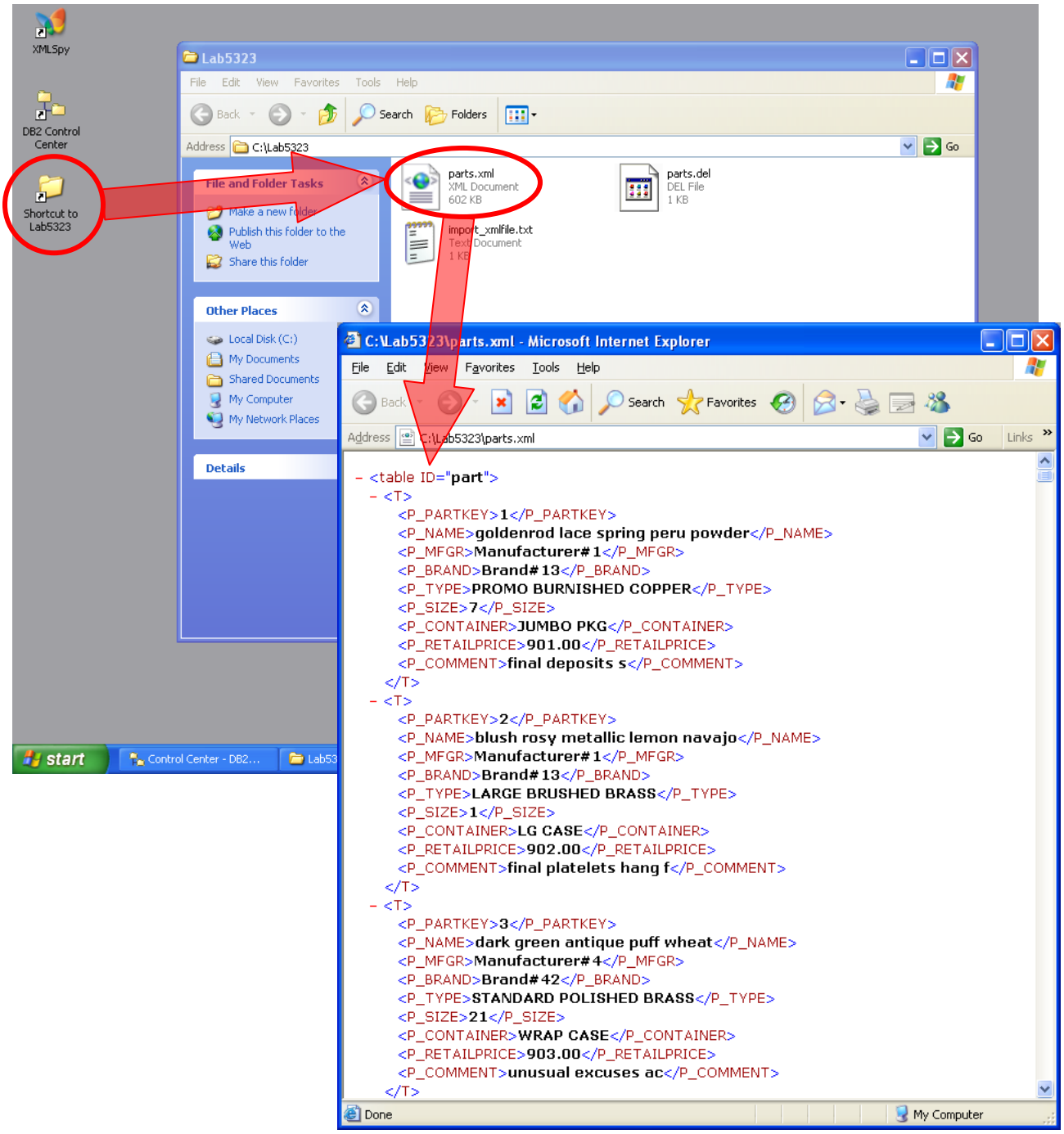


Click [Close].

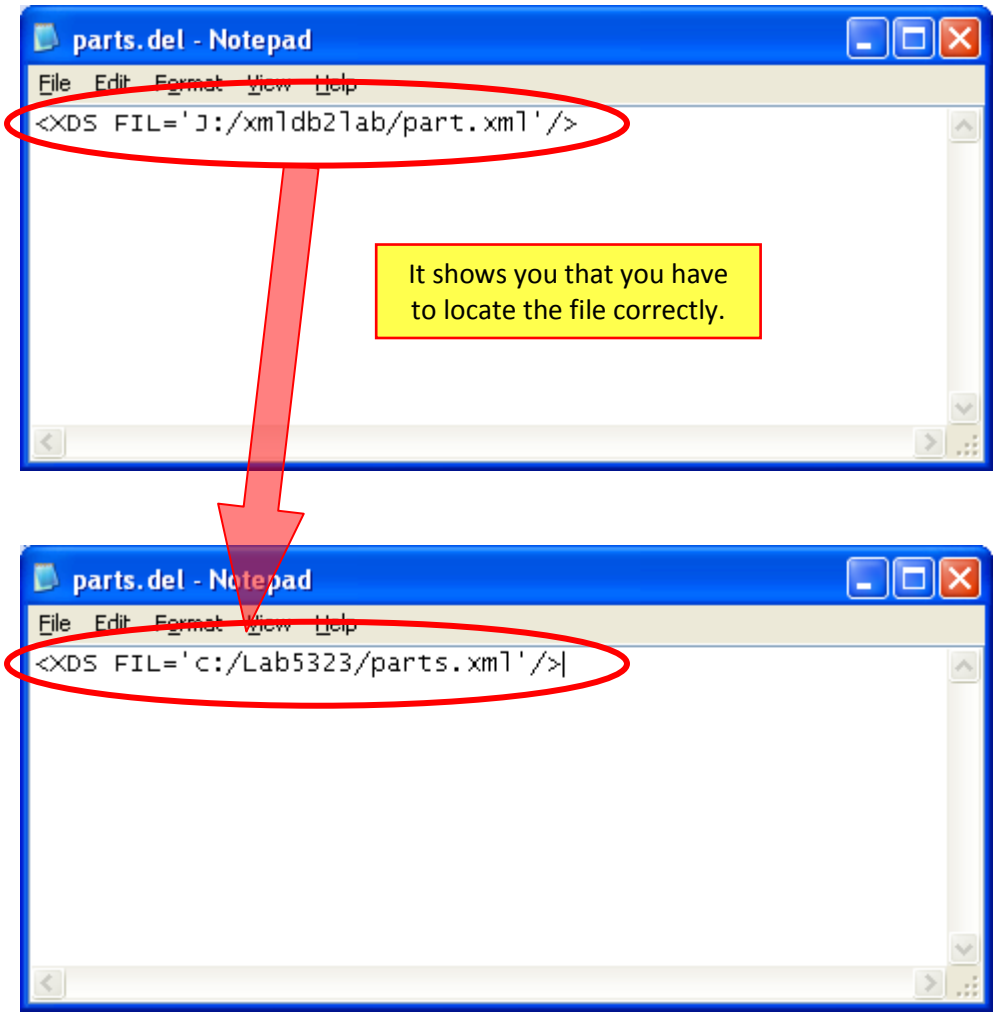


Check the xml file and other source files.

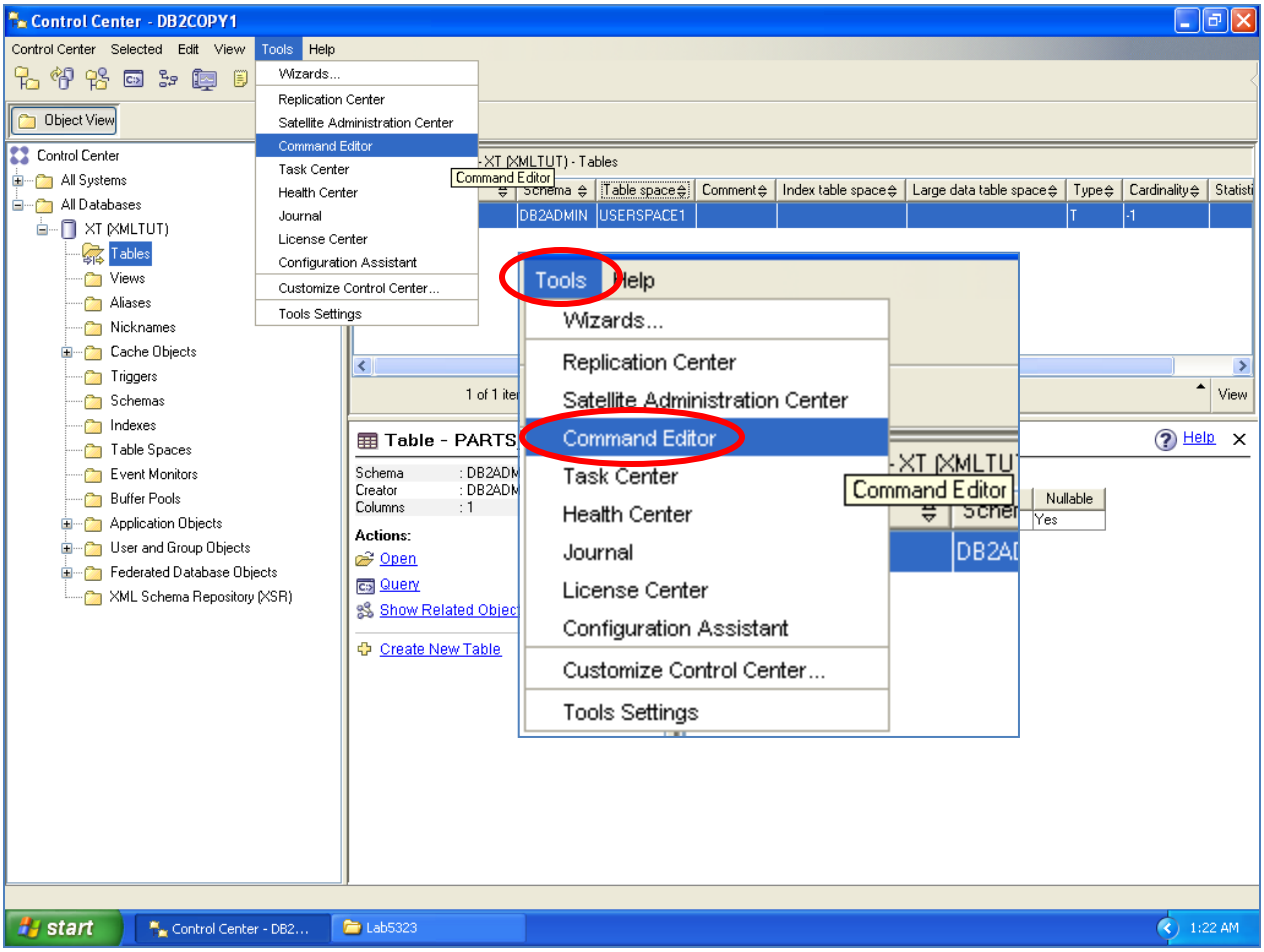
Click open the third icon, [Shortcut to Lab5323] on the desktop. There should be three files listed, [parts.xml], [parts.del] and [import_xmlfile.txt].



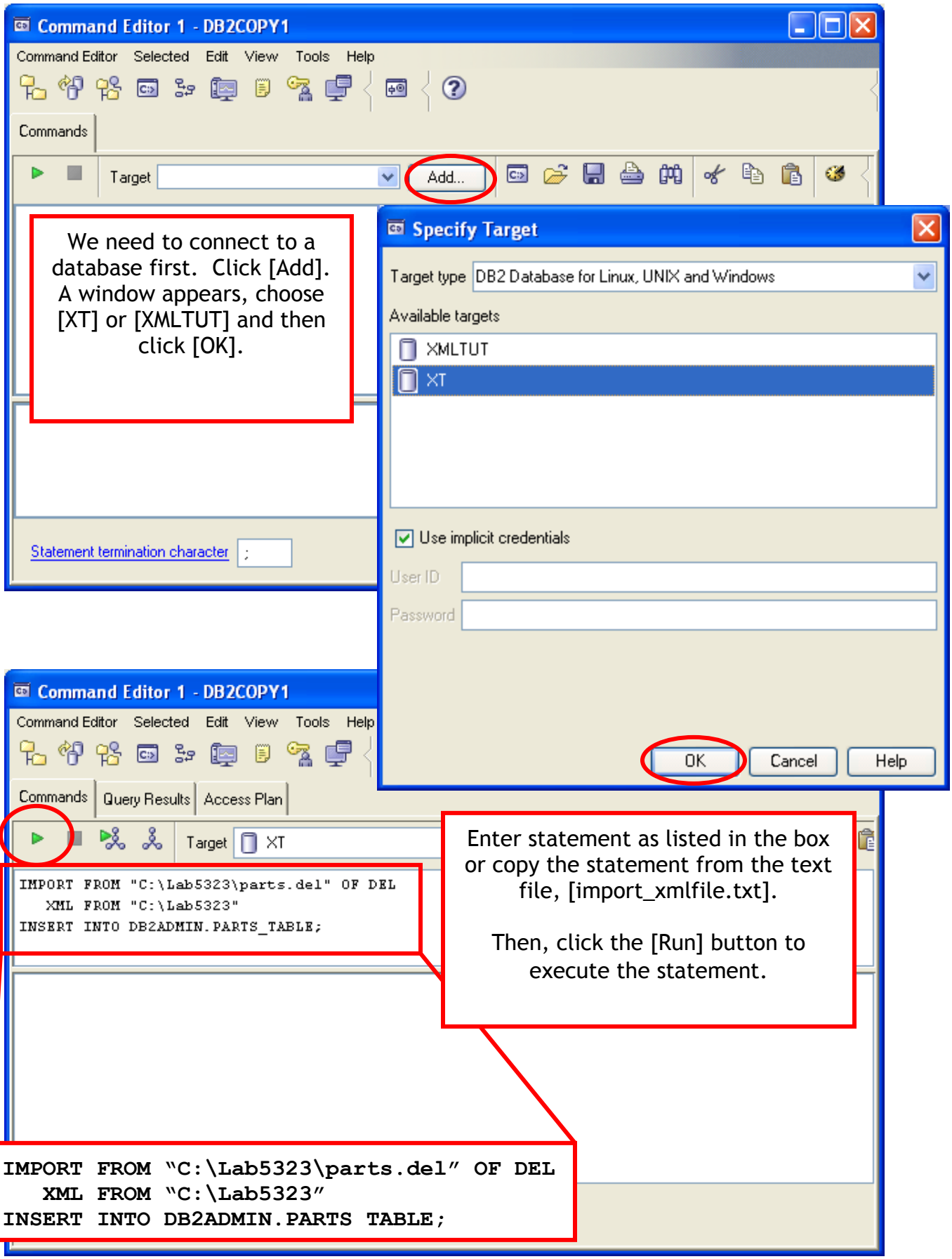
For [parts.del], there is one statement but we need to modify it. Or you can create a new one to overwrite the existing.

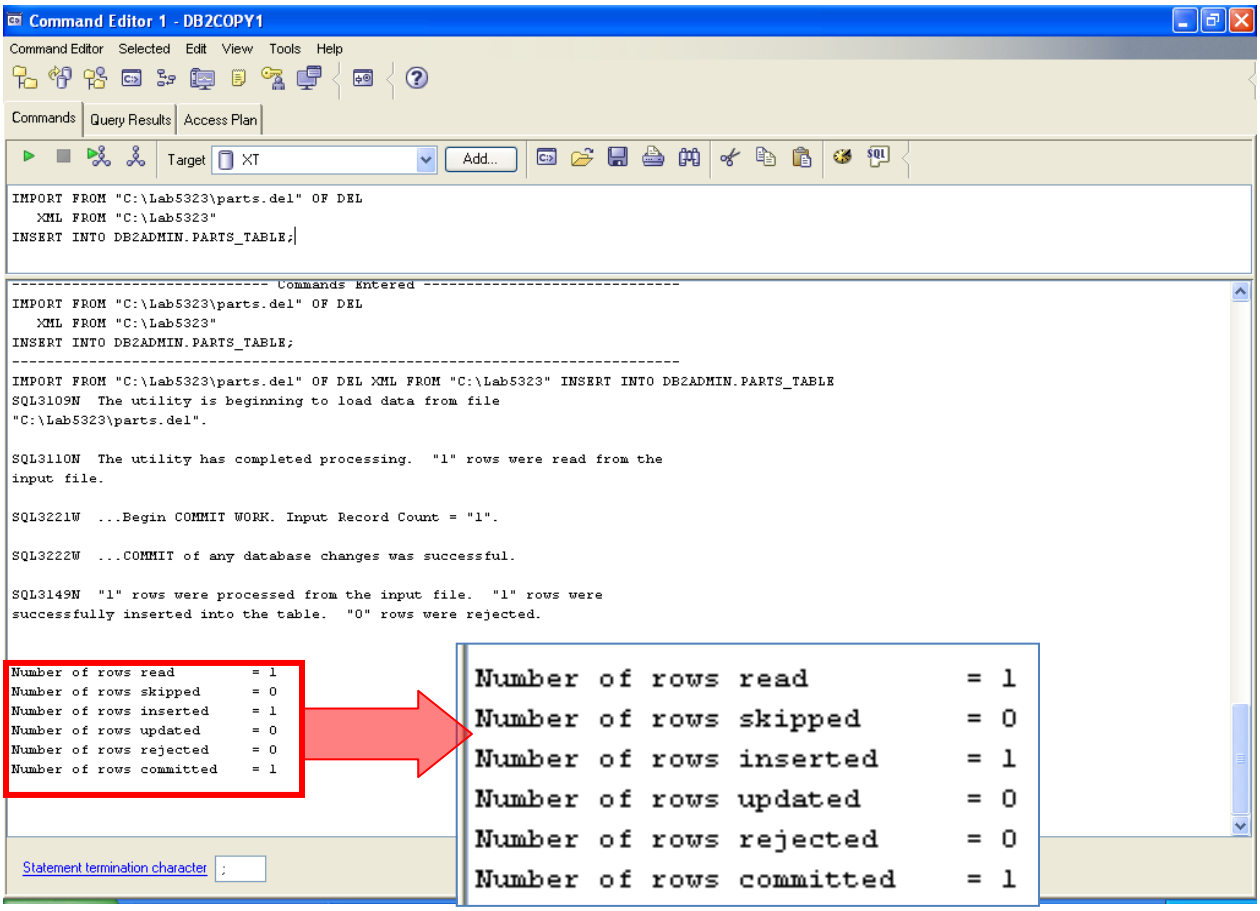


We get this file ready to allow us to import the xml file into the database.

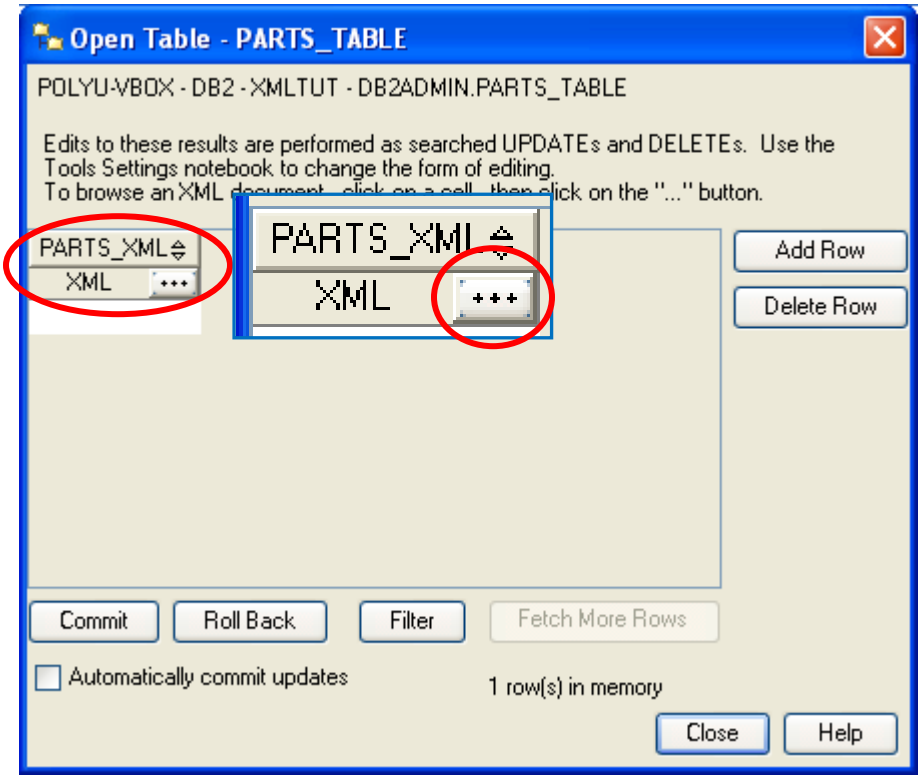


Open the [Command Editor]. From menu bar, choose [Tools] ➔ [Command Editor].

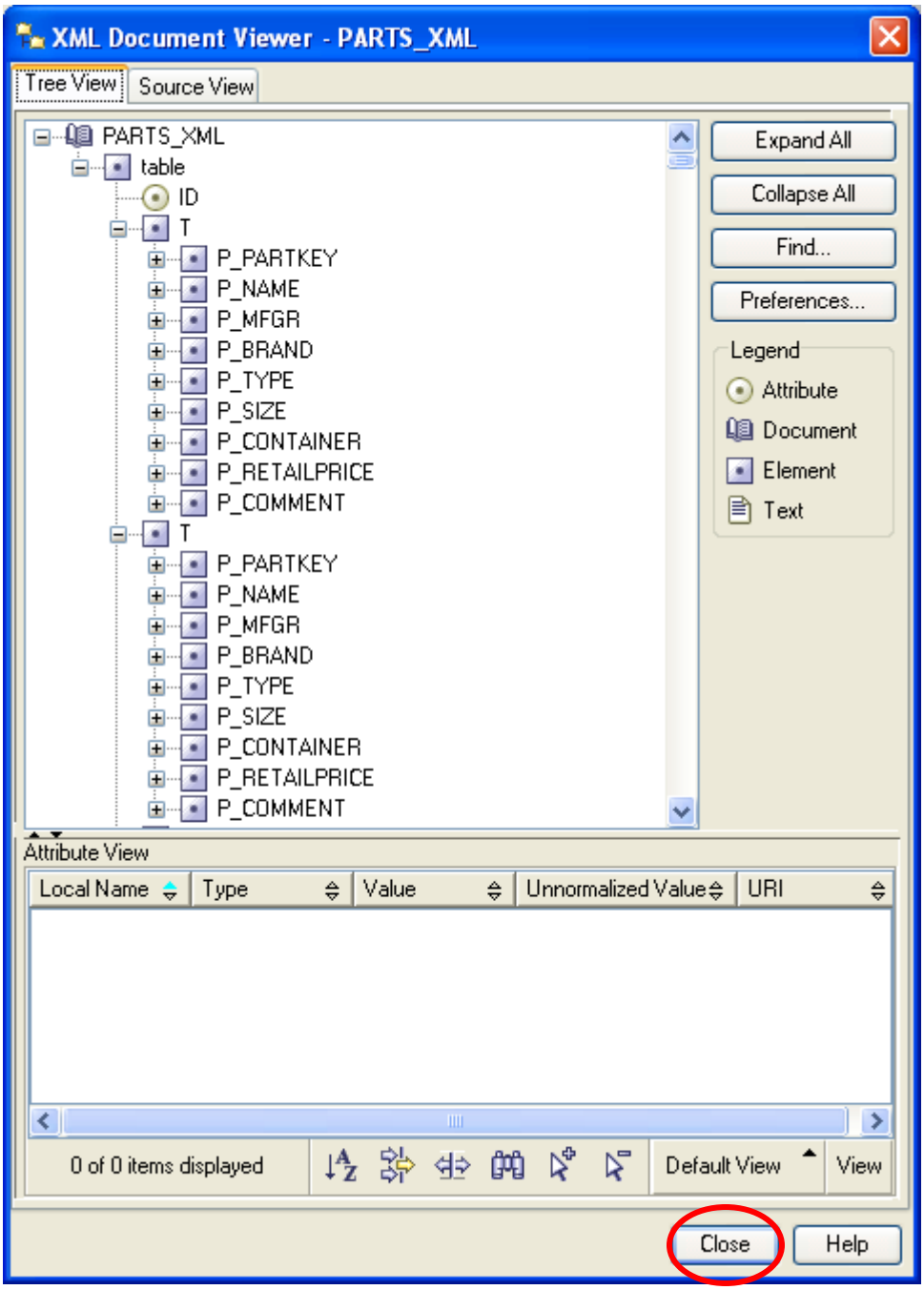

Command Editor 1 - DB2COPY1
Command Editor Selected Edit View Tools Help
Commands
Target
Add...
We need to connect to a database first. Click [Add]. A window appears, choose [XT] or [XMLTUT] and then click [OK].
Specify Target
Target type
DB2 Database for Linux, UNIX and Windows
Available targets
XMLTUT
XT
Use implicit credentials
User ID
Password
OK
Cancel
Help
Statement termination character
;
Command Editor 1 - DB2COPY1
Command Editor Selected Edit View Tools Help
Commands
Query Results
Access Plan
Target
XT
IMPORT FROM "C:\Lab5323\parts.del" OF DEL
XML FROM "C:\Lab5323"
INSERT INTO DB2ADMIN.PARTS_TABLE;
Enter statement as listed in the box or copy the statement from the text file, [import_xmlfile.txt].
Then, click the [Run] button to execute the statement.
IMPORT FROM "C:\Lab5323\parts.del" OF DEL
XML FROM "C:\Lab5323"
INSERT INTO DB2ADMIN.PARTS TABLE;



If you got this message, you have successfully imported the xml file into DB2 database.



Click […] button.



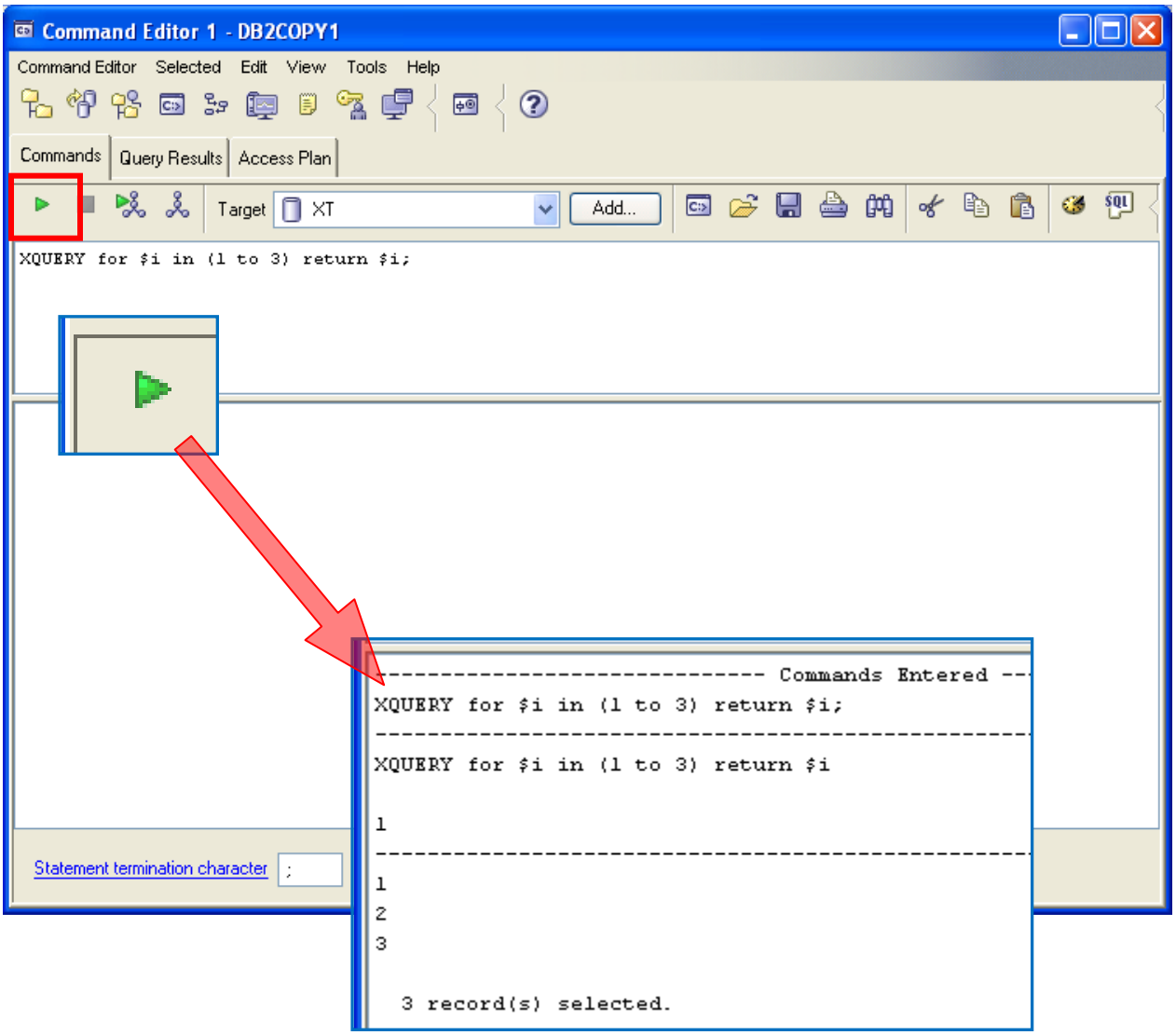
Check that the XML file is now imported. The document can be viewed through the [XML Document Viewer], i.e. press the […] button on the record row.

XQuery

Before we explore the xml file using the XQuery, we practice some simple commands. Open a [Command Editor] and enter the following statement.

```
XQUERY for $i in (1 to 3) return $i;
```

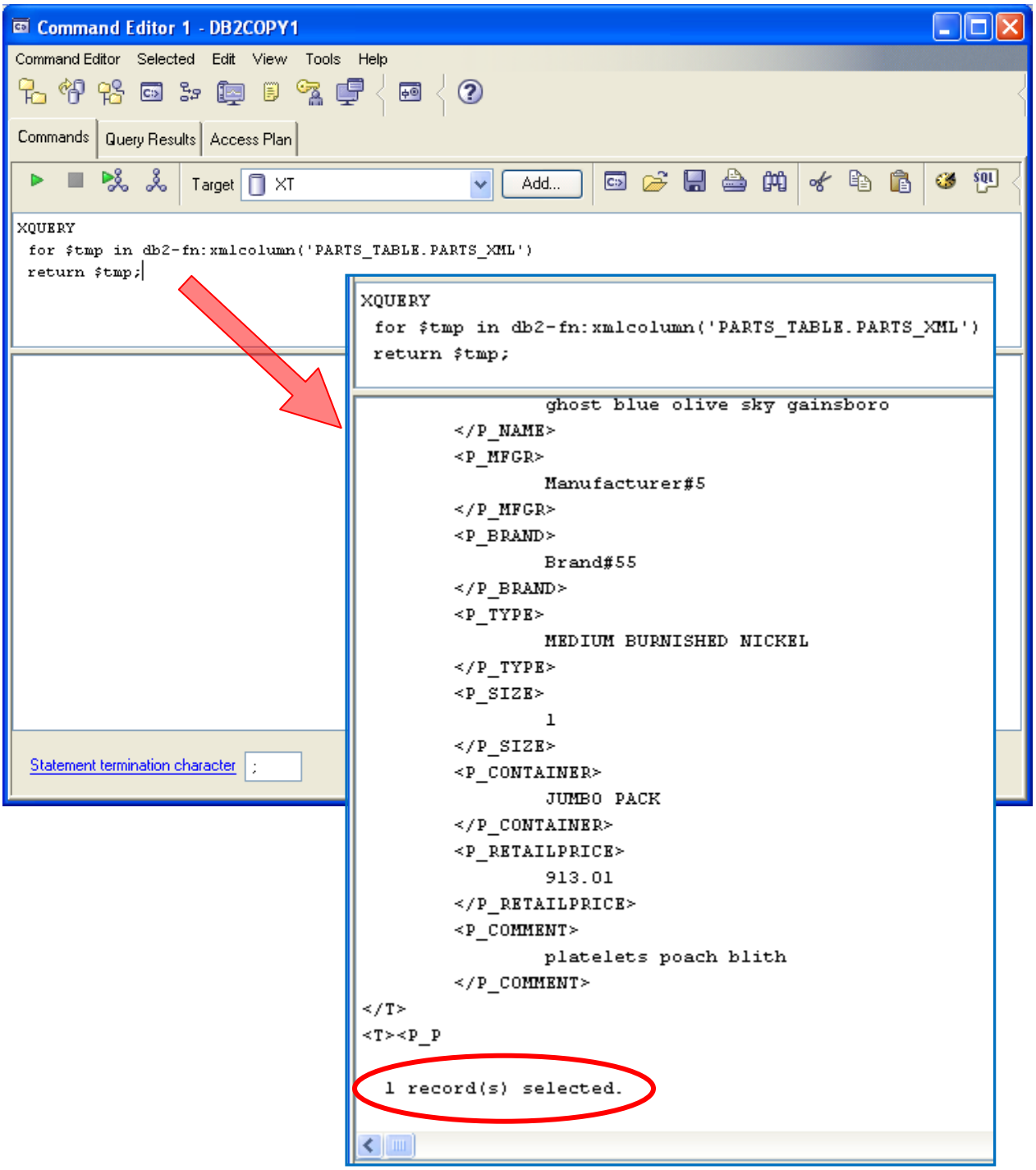
and then press the [Play] button.



Try another simple statement to retrieve records in the database. In [Command] box, enter this:

```
XQUERY for $tmp in db2-fn:xmlcolumn('PARTS_TABLE.PARTS_XML') return $tmp;
```

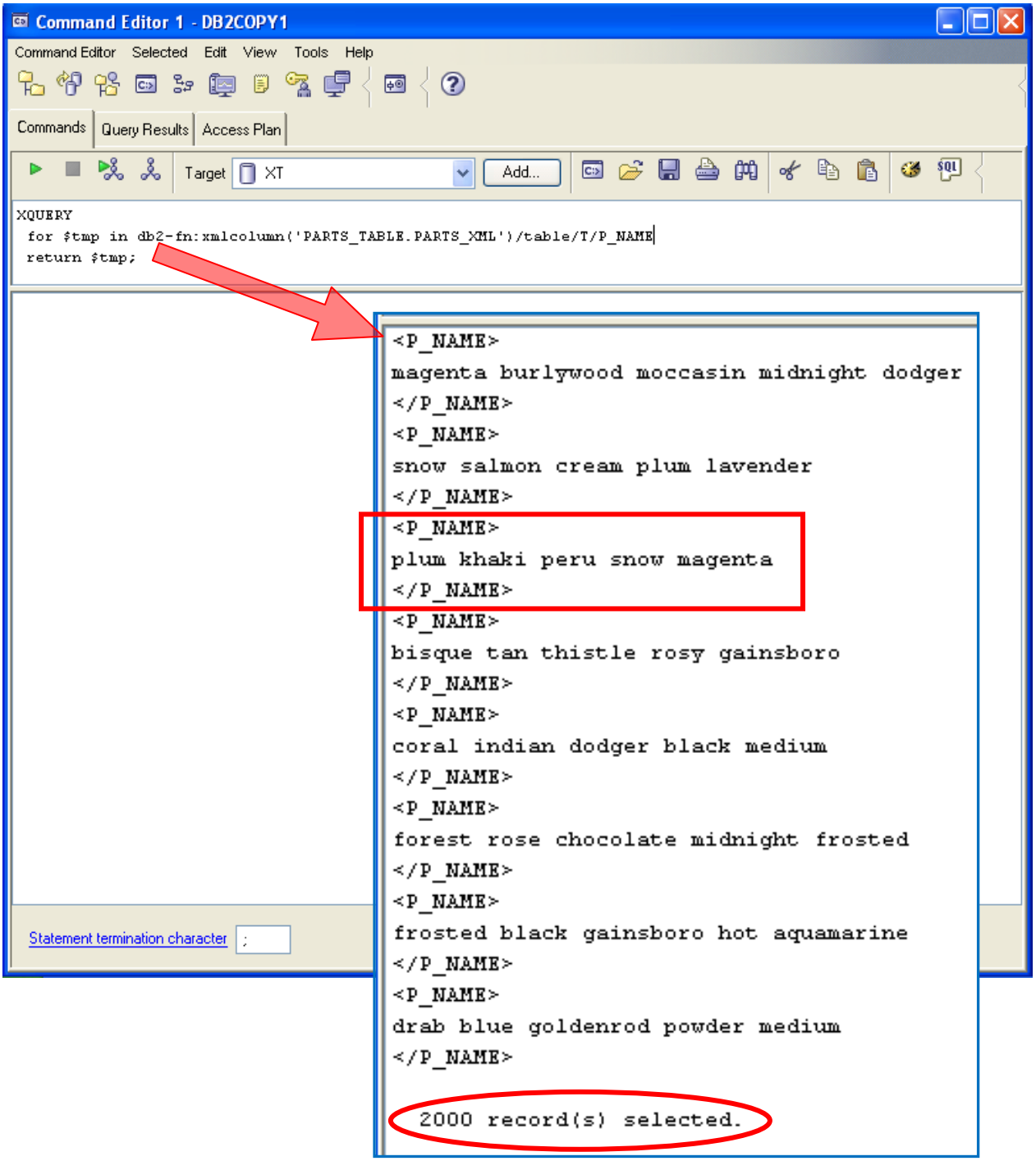
and press the [Play] button.



Of course, we have only one record in the table so that there is no doubt we retrieve only ONE record.

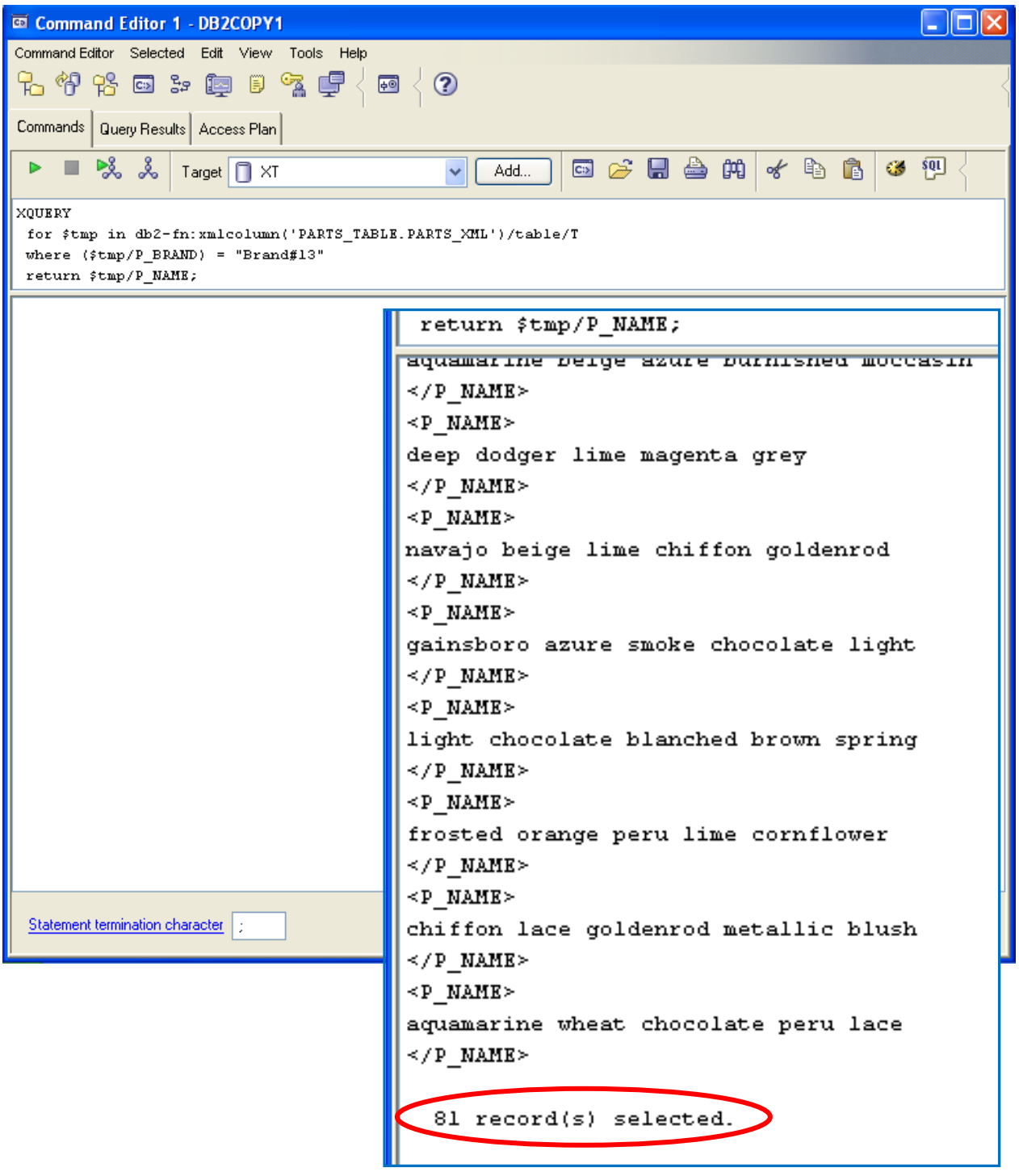
Now, we try something more specific, say retrieve only the Product Name. Use this.

```
XQUERY for $tmp in db2-fn:xmlcolumn('PARTS_TABLE.PARTS_XML')/table/T/P_NAME
return $tmp;
```



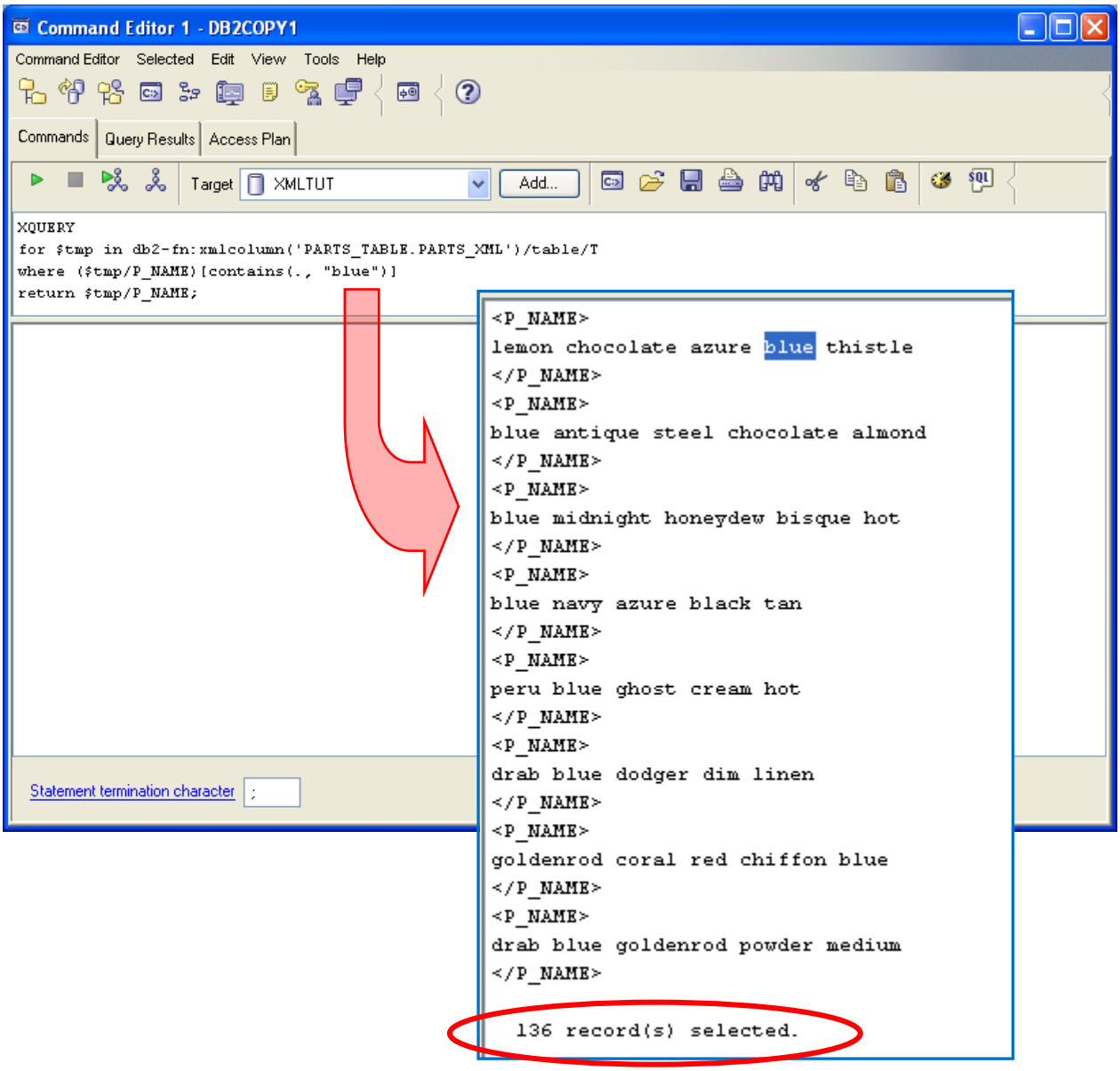
Well, write one with the "Where" clause.

```
XQUERY for $tmp in db2-fn:xmlcolumn('PARTS_TABLE.PARTS_XML')/table/T
where ($tmp/P_BRAND) = "Brand#13" return $tmp/P_NAME;
```



One more example

```
XQUERY for $tmp in db2-fn:xmlcolumn('PARTS_TABLE.PARTS_XML')/table/T
where ($tmp/P_NAME)[contains(., "blue")]
return $tmp/P_NAME;
```



Try others by yourself to get familiar with the XQUERY. Good Luck!