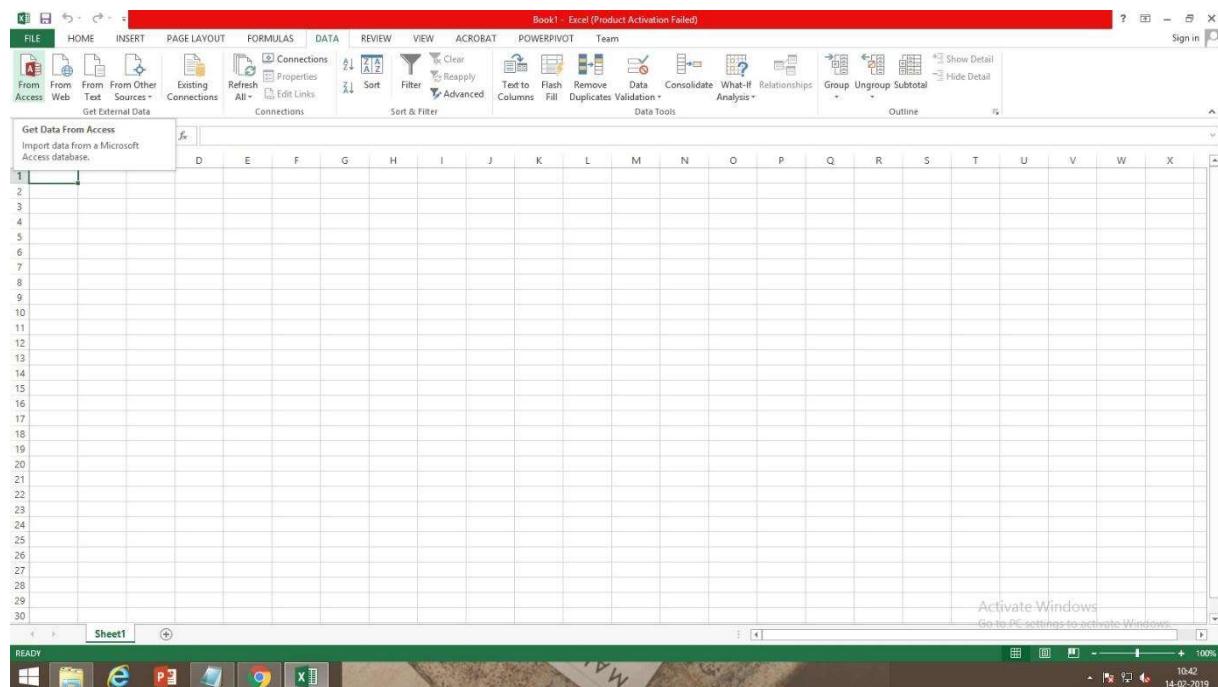


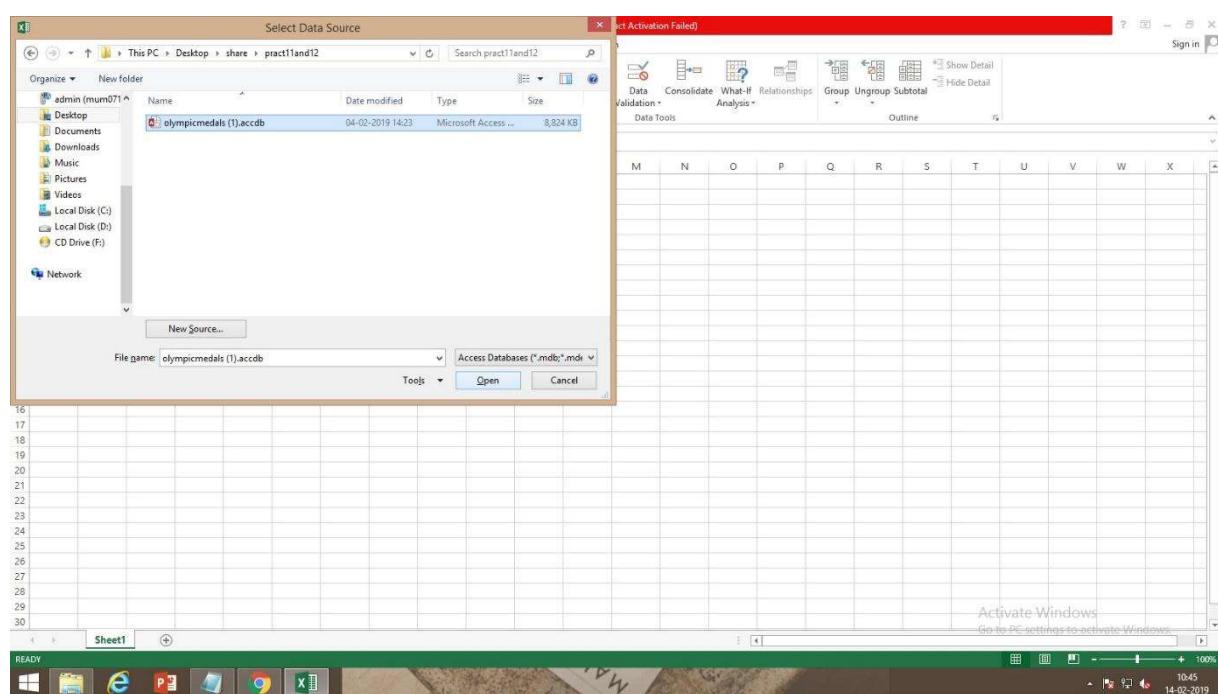
Practical 5(A): Import the datawarehouse data in Microsoft Excel and create the Pivot table and Pivot Chart.

Step 1: Open a blank workbook.

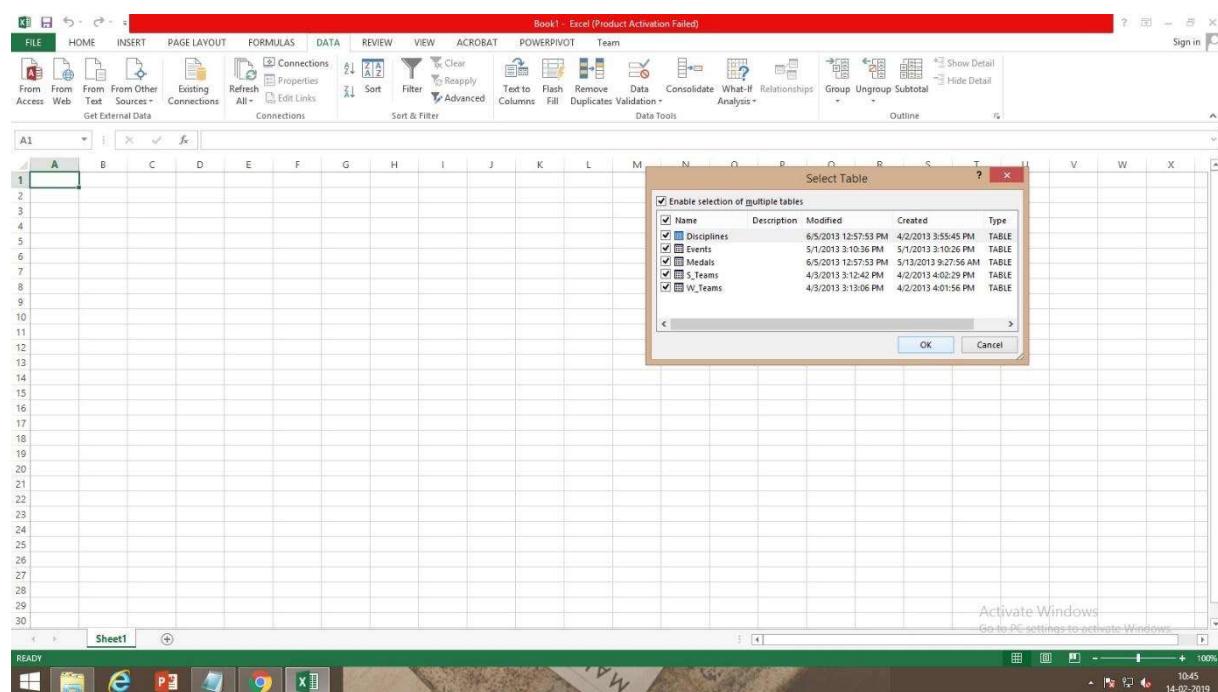
Click Data -> Get External Data -> From Access.



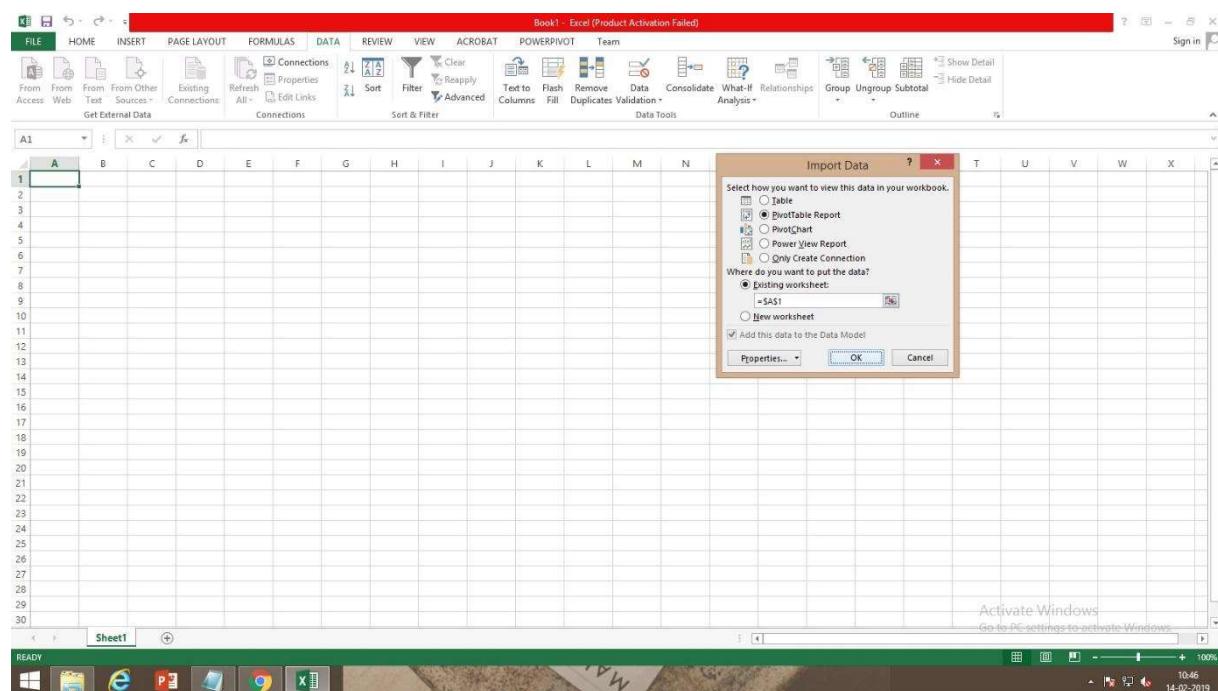
Step 2: Select the OlympicMedals.accdb file and click Open.



Step 3: Check the Enable Selection of Multiple Tables box and select all the tables. Click OK.



Step 4: The Import Data window appears. Select the PivotTable Report option and click OK.



Step 5: A pivot table is created using the imported tables.

The screenshot shows the Microsoft Excel ribbon with the 'PIVOTTABLE TOOLS' tab selected. On the left, a PivotTable is visible with the range A1:T39. The 'PivotTable Fields' pane on the right shows the 'Medals' table under the 'ACTIVE' tab. The 'COLUMNS' section has 'DisciplineEvent' selected. The 'ROWS' and 'VALUES' sections are currently empty.

Step 6: In PivotTable Fields, expand the Medals table. Find the NOC_CountryRegions and drag it to the Columns area.

The screenshot shows the Microsoft Excel ribbon with the 'PIVOTTABLE TOOLS' tab selected. The 'PivotTable Fields' pane on the right shows the 'Medals' table expanded. The 'COLUMNS' section now includes 'NOC_CountryRegion'. The 'ROWS' and 'VALUES' sections are empty.

Step 7: Find the Disciplines table and drag it to the Rows area.

The screenshot shows a Microsoft Excel window titled "Book1 - Excel (Product Activation Failed)". The ribbon is visible at the top with tabs like FILE, HOME, INSERT, PAGE LAYOUT, FORMULAS, DATA, REVIEW, VIEW, ACROBAT, POWERPIVOT, and Team. The PivotTable Fields pane on the right is open, showing the "ACTIVE" section. Under "Choose fields to add to report:", the "Disciplines" table is expanded, and the "Discipline" field is selected with a checkmark. The "ROWS" section is set to "Discipline". The main worksheet area shows a list of sports disciplines from 1 to 30, starting with Alpine Skiing and ending with Freestyle Ski. The PivotTable itself is located in the center of the screen, showing data for the "AFG" row label.

Step 8: filter disciplines to display only five sports: archery, diving, fencing, figure skating and speed skating.

Click anywhere in the PivotTable to ensure the excel PivotTable is selected. In the PivotTable Fields list, where the Disciplines table is expanded, hover over its Discipline field and a drop down arrow appears to the right of the field. Click the dropdown, click “Select All” to remove all selections, then scroll down and select archery, diving, fencing, figure skating and speed skating. Click OK.

The screenshot shows the same Microsoft Excel environment as the previous one. The context menu is now open over the "Discipline" field in the PivotTable Fields pane. The menu includes options like "Sort A to Z", "Sort Z to A", "More Sort Options...", "Clear Filter From 'Discipline'", "Label Filters", "Value Filters", and "Search Discipline". The "Search Discipline" dropdown is open, showing a list of sports disciplines. The "OK" button is visible at the bottom of the context menu. The main worksheet and PivotTable remain the same as in the previous screenshot.

Step 9: In PivotTable Fields, from the Medals table, drag Medal to the VALUES area. Since Values must be numeric, Excel automatically changes Medal to Count of Medal.

| | AUS | AUT | BEL | BLR | BOH | BUL | CAN | CHN | CUB | DEN | EGY | ESP | EUA | EUN | FIN | FRA | FRG | GBR | GDR | GER | GRE | HUN | INA | ITA | JPN | KAZ | KOR | MEX | NED | NOR | POL | PRK | ROU | RUM | SLO | SWE | TUR | URU | VIE | YUG | ZAF |
|--------------------|----------|-----------|-----------|-----------|----------|----------|----------|-----------|------------|-----------|----------|----------|----------|-----------|-----------|-----------|------------|-----------|-----------|-----------|------------|----------|------------|----------|------------|-----------|----------|-----------|-----------|------------|-----------|-----------|----------|-----------|-----|-----|-----|-----|-----|-----|-----|
| Archery | 2 | 51 | | | | | | | | 15 | | 3 | 4 | 6 | 46 | | 13 | 6 | | 3 | 12 | 3 | 52 | 9 | 4 | | | | | | | | | | | | | | | | |
| Divining | 17 | | | | | | | | 11 | 60 | 2 | 2 | 4 | 3 | 1 | 7 | 7 | 24 | 2 | 9 | | | 11 | | | | | | | | | | | | | | | | | | |
| Fencing | 5 | 13 | 44 | 5 | | | | | 19 | 24 | 5 | 1 | 10 | 13 | 283 | 47 | 24 | 1 | 51 | 226 | 328 | 1 | 3 | 1 | 24 | 81 | 39 | | | | | | | | | | | | | | |
| Figure skating | 25 | 3 | | | | | | | 28 | 7 | | | 5 | 9 | 4 | 18 | 3 | 19 | 13 | 11 | 12 | 2 | 2 | | 3 | 7 | | | | | | | | | | | | | | | |
| Speed skating | 1 | 6 | 1 | 1 | | | | | 3 | 43 | 19 | | 2 | 1 | 24 | 3 | 1 | 29 | 34 | | 7 | 15 | 1 | 18 | 75 | 79 | 2 | 2 | | | | | | | | | | | | | |
| Grand Total | 5 | 20 | 44 | 99 | 1 | 5 | 3 | 82 | 120 | 24 | 7 | 2 | 4 | 21 | 30 | 34 | 348 | 53 | 64 | 50 | 126 | 2 | 238 | 3 | 358 | 21 | 1 | 73 | 12 | 111 | 86 | 87 | 2 | 39 | | | | | | | |

Step 10: From the Medals table, select Medal again and drag it into the FILTERS area.

| | AUS | AUT | BEL | BLR | BOH | BUL | CAN | CHN | CUB | DEN | EGY | ESP | EUA | EUN | FIN | FRA | FRG | GBR | GDR | GER | GRE | HUN | INA | ITA | JPN | KAZ | KOR | MEX | NED | NOR | POL | PRK | ROU | RUM | SLO | SWE | TUR | URU | VIE | YUG | ZAF |
|--------------------|----------|-----------|-----------|-----------|----------|----------|----------|-----------|------------|-----------|----------|----------|----------|-----------|-----------|-----------|------------|-----------|-----------|-----------|------------|----------|------------|----------|------------|-----------|----------|-----------|-----------|------------|-----------|-----------|----------|-----------|-----|-----|-----|-----|-----|-----|-----|
| Archery | 2 | 51 | | | | | | | | 15 | | 3 | 4 | 6 | 46 | | 13 | 6 | | 3 | 12 | 3 | 52 | 9 | 4 | | | | | | | | | | | | | | | | |
| Divining | 17 | | | | | | | | 11 | 60 | 2 | 2 | 4 | 3 | 1 | 7 | 7 | 24 | 2 | 9 | | | 11 | | | | | | | | | | | | | | | | | | |
| Fencing | 5 | 13 | 44 | 5 | | | | | 19 | 24 | 5 | 1 | 10 | 13 | 283 | 47 | 24 | 1 | 51 | 226 | 328 | 1 | 3 | 1 | 24 | 81 | 39 | | | | | | | | | | | | | | |
| Figure skating | 25 | 3 | | | | | | | 28 | 7 | | | 5 | 9 | 4 | 18 | 3 | 19 | 13 | 11 | 12 | 2 | 2 | | 3 | 7 | | | | | | | | | | | | | | | |
| Speed skating | 1 | 6 | 1 | 1 | | | | | 3 | 43 | 19 | | 2 | 1 | 24 | 3 | 1 | 29 | 34 | | 7 | 15 | 1 | 18 | 75 | 79 | 2 | 2 | | | | | | | | | | | | | |
| Grand Total | 5 | 20 | 44 | 99 | 1 | 5 | 3 | 82 | 120 | 24 | 7 | 2 | 4 | 21 | 30 | 34 | 348 | 53 | 64 | 50 | 126 | 2 | 238 | 3 | 358 | 21 | 1 | 73 | 12 | 111 | 86 | 87 | 2 | 39 | | | | | | | |

Step 11: Let's filter the PivotTable to display only those countries or regions with more than 90 total medals.

In the PivotTable, click the dropdown to the right of Column Labels.

The screenshot shows a Microsoft Excel spreadsheet titled "Book1 - Excel (Product Activation Failed)". The PivotTable is named "PivotTable1" and has "Medal" as the active field. The PivotTable Fields pane on the right shows fields like Gender, Event, Sport, DisciplineID, Event, Medal, MedalKey, and DisciplineEvent. The PivotTable itself displays medal counts for various countries. A value filter is applied, showing only countries with more than 90 total medals. The PivotTable Fields pane also shows the "Count of Medal" field under the Values section.

Step 12: Select Value Filters and select Greater Than....

This screenshot is similar to the previous one, showing the same Excel environment and PivotTable setup. However, the "Value Filters" dropdown menu is now open, revealing options such as Equals, Does Not Equal, Greater Than, Greater Than Or Equal To, Less Than, Less Than Or Equal To, Between, Not Between, and Top 10. This indicates that the user is in the process of applying a specific filter criterion.

Step 13: Type 90 in the last field (on the right). Click OK.

PivotTable Name: Active Field: PivotTable1 Medal

PivotTable Fields ACTIVE | ALL

Choose fields to add to report:

- Gender
- Event,gender
- Sport
- DisciplineID
- Event
- Medal
- MedalKey
- DisciplineEvent

FILTERS: Medal

ROWS: Discipline

VALUES: Count of Medal

| | AUS | AUT | BEL | BLR | BOH | BUL | CAN | CHN | CUB | DEN | EGY | ESP | EUA | EUN | FIN | FRA | FRG | GBR |
|----------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Archery | 2 | 51 | | | | | 15 | | 3 | 4 | 6 | 46 | | 13 | | | | |
| Diving | 17 | | | | | | 11 | 60 | 2 | 2 | 4 | 3 | 1 | 7 | | | | |
| Fencing | 5 | 13 | 44 | 5 | | | 19 | 24 | 5 | 1 | 10 | 13 | 283 | 47 | 24 | | | |
| Figure skating | 25 | 3 | | | | | 28 | 7 | | | 5 | 9 | 4 | 18 | 3 | 19 | | |
| Speed skating | 1 | 6 | 1 | 1 | | | 3 | 43 | 19 | | 2 | 1 | 24 | | 3 | 1 | | |
| Grand Total | 5 | 20 | 44 | 99 | 1 | 5 | 3 | 82 | 120 | 24 | 7 | 2 | 4 | 21 | 30 | 348 | 53 | 64 |

Step 14: Your PivotTable looks like the following screen.

PivotTable Fields ACTIVE | ALL

Choose fields to add to report:

- Gender
- Event,gender
- Sport
- DisciplineID
- Event
- Medal
- MedalKey
- DisciplineEvent

FILTERS: Medal

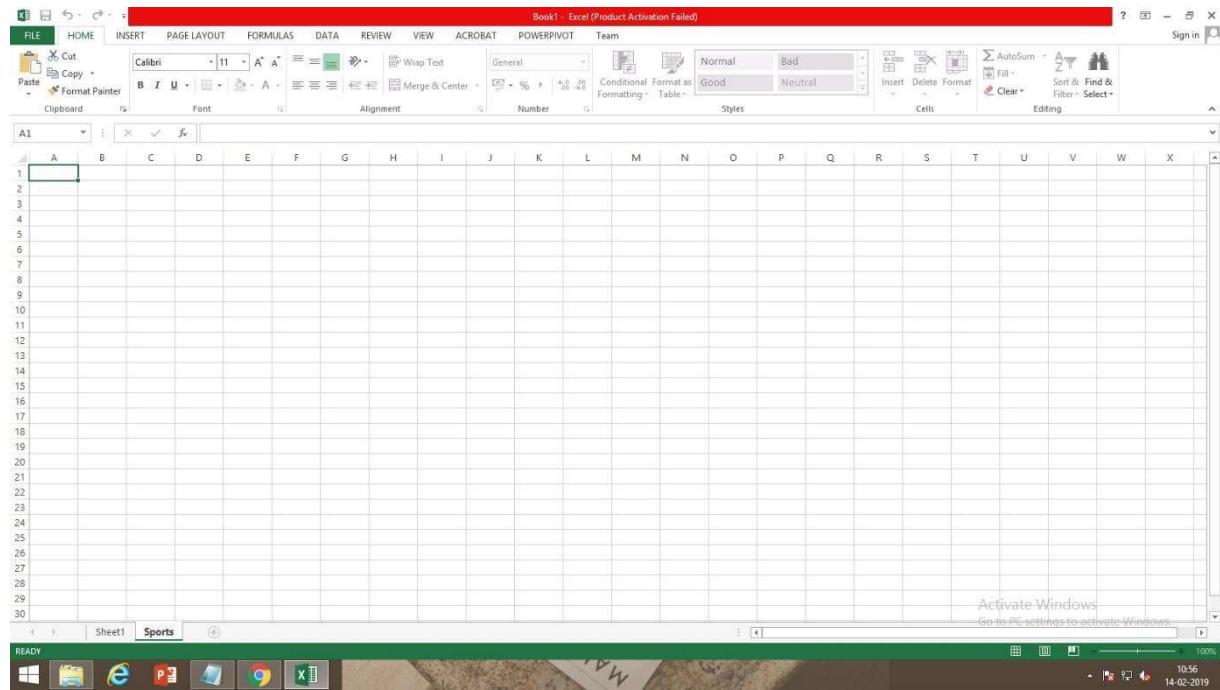
ROWS: Discipline

VALUES: Count of Medal

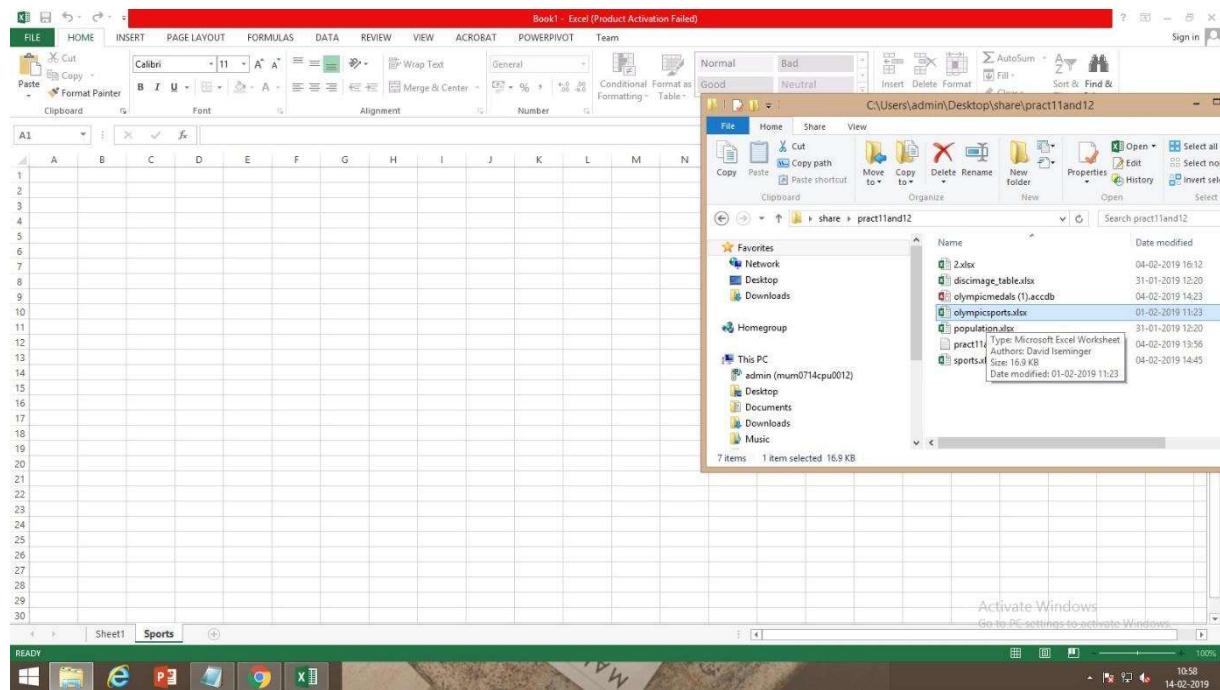
| | CHN | FRA | GER | HUN | ITA | NED | RUS | URS | USA | Grand Total | |
|----------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-------------|------|
| Archery | 51 | 15 | 46 | 6 | 12 | 9 | 1 | 7 | 52 | 199 | |
| Diving | 60 | 1 | 24 | | 9 | 24 | 14 | 131 | | 263 | |
| Fencing | 44 | 19 | 283 | 51 | 226 | 328 | 24 | 41 | 145 | 48 | 1209 |
| Figure skating | 3 | 7 | 18 | 11 | 12 | 2 | 3 | 29 | 42 | 51 | 178 |
| Speed skating | 1 | 19 | 34 | | 7 | 75 | 8 | 60 | 73 | | |
| Grand Total | 99 | 120 | 348 | 126 | 238 | 358 | 111 | 103 | 268 | 355 | |

Step 15: Let's start by creating a blank worksheet, then import data from an Excel workbook.

Insert a new Excel worksheet, and name it Sports.



Step 16: Browse to the folder that contains the downloaded sample data files, and open OlympicSports.xlsx.



Step 17: Select and copy the data in Sheet1. If you select a cell with data, such as cell A1, you can press Ctrl + A to select all adjacent data. Close the OlympicSports.xlsx workbook.

On the Sports worksheet, place your cursor in cell A1 and paste the data.

| Sport | |
|-------------------|-----|
| Aquatics | S1 |
| Archery | S2 |
| Athletics | S3 |
| Badminton | S4 |
| Baseball | S5 |
| Basketball | S6 |
| Basque Pelota | S7 |
| Biathlon | S8 |
| Bobsleigh | S9 |
| Boxing | S10 |
| Canoë / Kayak | S11 |
| Cricket | S12 |
| Croquet | S13 |
| Curling | S14 |
| Cycling | S15 |
| Equestrian | S16 |
| Fencing | S17 |
| Football | S18 |
| Golf | S19 |
| Gymnastics | S20 |
| Handball | S21 |
| Hockey | S22 |
| Ice Hockey | S23 |
| Jeu de paume | S24 |
| Judo | S25 |
| Lacrosse | S26 |
| Luge | S27 |
| Modern Pentathlon | S28 |
| Polo | S29 |

Step 18: With the data still highlighted, press Ctrl + T to format the data as a table. You can also format the data as a table from the ribbon by selecting HOME > Format as Table. Since the data has headers, select My table has headers in the Create Table window that appears.

| Sport | |
|-------------------|-----|
| Aquatics | S1 |
| Archery | S2 |
| Athletics | S3 |
| Badminton | S4 |
| Baseball | S5 |
| Basketball | S6 |
| Basque Pelota | S7 |
| Biathlon | S8 |
| Bobsleigh | S9 |
| Boxing | S10 |
| Canoë / Kayak | S11 |
| Cricket | S12 |
| Croquet | S13 |
| Curling | S14 |
| Cycling | S15 |
| Equestrian | S16 |
| Fencing | S17 |
| Football | S18 |
| Golf | S19 |
| Gymnastics | S20 |
| Handball | S21 |
| Hockey | S22 |
| Ice Hockey | S23 |
| Jeu de paume | S24 |
| Judo | S25 |
| Lacrosse | S26 |
| Luge | S27 |
| Modern Pentathlon | S28 |
| Polo | S29 |

Step 19: Name the table. In TABLE TOOLS > DESIGN > Properties, locate the Table Name field and type Sports. The workbook looks like the following screen.

Save the workbook.

The screenshot shows a Microsoft Excel spreadsheet titled "Book1 - Excel (Product Activation Failed)". The ribbon is visible at the top with tabs like FILE, HOME, INSERT, PAGE LAYOUT, FORMULAS, DATA, REVIEW, VIEW, ACROBAT, POWERPIVOT, Team, and DESIGN. The DESIGN tab is selected. A table is present in the worksheet, with the first row labeled "Sport". The table has 30 rows of data, each containing a sport name and its corresponding code. The "Table Name" dropdown in the ribbon is set to "Sports". The "Table Style Options" group in the DESIGN ribbon contains several checked checkboxes: Header Row, First Column, Filter Button, Total Row, Last Column, and Banded Rows. The "Table Styles" section shows a grid of color-coded styles. The status bar at the bottom right indicates "Activate Windows Go to PC settings to activate Windows" and the date "14-02-2019".

Step 20: Insert a new Excel worksheet, and name it Hosts.

The screenshot shows the same Microsoft Excel spreadsheet from Step 19. A new worksheet tab named "Hosts" has been inserted between "Sports" and "Sheet1". The "Hosts" sheet is currently active, showing an empty table structure with columns A through X and rows 1 through 30. The ribbon and status bar are identical to the previous screenshot, indicating the same date and activation status.

Step 21: Select and copy the following table, including the table headers.

| City | NOC_CountryRegion | Alpha-2 Code | Edition | Se |
|------------------------|-------------------|--------------|---------|----|
| Melbourne / Stockholm | AUS | AS | 1956 | Su |
| Sydney | AUS | AS | 2000 | Su |
| Innsbruck | AUT | AT | 1964 | W |
| Innsbruck | AUT | AT | 1976 | W |
| Antwerp | BEL | BE | 1920 | Su |
| Antwerp | BEL | BE | 1920 | W |
| Montreal | CAN | CA | 1976 | Su |
| Lake Placid | CAN | CA | 1980 | W |
| Calgary | CAN | CA | 1988 | W |
| St. Moritz | SUI | SZ | 1928 | W |
| St. Moritz | SUI | SZ | 1948 | W |
| Beijing | CHN | CH | 2008 | Su |
| Berlin | GER | GM | 1936 | Su |
| Garmisch-Partenkirchen | GER | GM | 1936 | W |
| Barcelona | ESP | SP | 1992 | Su |
| Helsinki | FIN | FI | 1952 | Su |
| Paris | FRA | FR | 1900 | Su |
| Paris | FRA | FR | 1924 | Su |
| Chamonix | FRA | FR | 1924 | W |
| Grenoble | FRA | FR | 1968 | W |
| Albertville | FRA | FR | 1992 | W |
| London | GBR | UK | 1908 | Su |
| London | GBR | UK | 1908 | W |
| London | GBR | UK | 1948 | Su |
| Munich | GER | DE | 1972 | Su |
| Athens | GRC | GR | 2004 | Su |
| Cortina d'Ampezzo | ITA | IT | 1956 | W |
| Rome | ITA | IT | 1960 | Su |
| Turin | ITA | IT | 2006 | W |
| Tokyo | JPN | JA | 1964 | Su |

| City | NOC_CountryRegion | Alpha-2 Code | Edition | Se |
|----------------|-------------------|--------------|---------|----|
| Sapporo | JPN | JA | 1972 | W |
| Nagano | JPN | JA | 1998 | W |
| Seoul | KOR | KS | 1988 | Su |
| Mexico | MEX | MX | 1968 | Su |
| Amsterdam | NED | NL | 1928 | Su |
| Oslo | NOR | NO | 1952 | W |
| Lillehammer | NOR | NO | 1994 | W |
| Stockholm | SWE | SW | 1912 | Su |
| St Louis | USA | US | 1904 | Su |
| Los Angeles | USA | US | 1932 | Su |
| Lake Placid | USA | US | 1932 | W |
| Squaw Valley | USA | US | 1960 | W |
| Moscow | URS | RU | 1980 | Su |
| Los Angeles | USA | US | 1984 | Su |
| Atlanta | USA | US | 1996 | Su |
| Salt Lake City | USA | US | 2002 | W |
| Sarajevo | YUG | YU | 1984 | W |

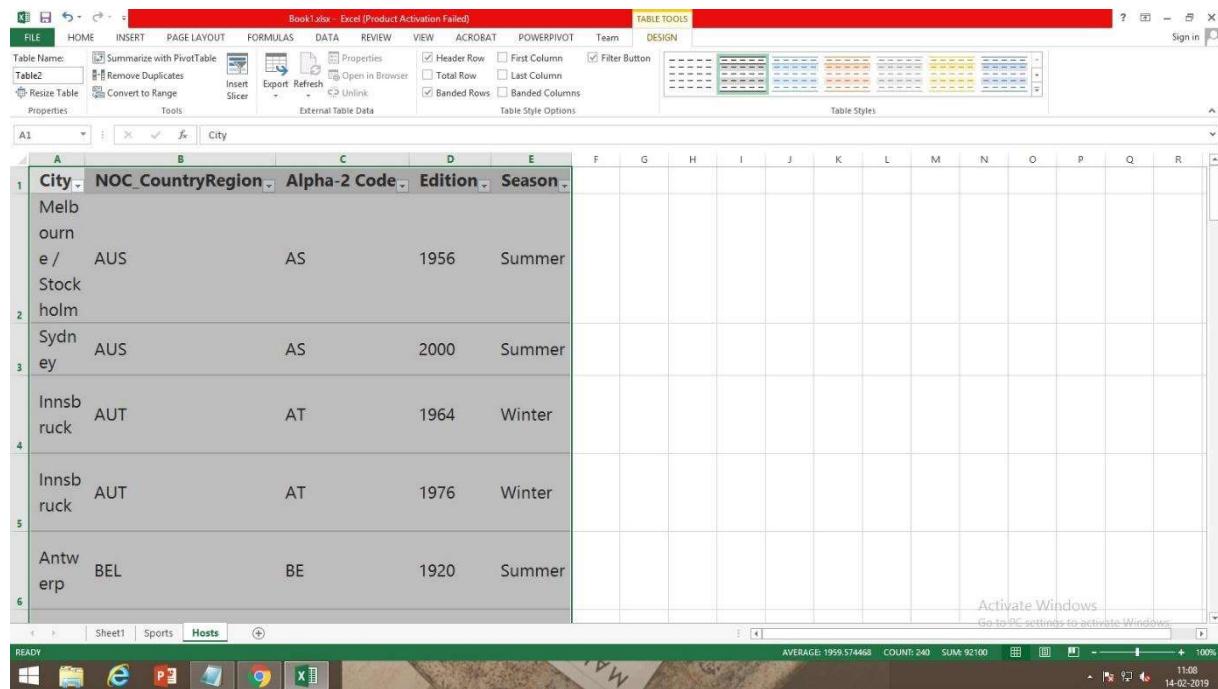
In Excel, place your cursor in cell A1 of the Hosts worksheet and paste the data.

| City | NO | C_C | haountry | Edit | Sea | Melbour | ne/Stoc | AUS | AS | 1956 | Summer |
|------|----|-----|----------|------|-----|---------|---------|-----|----|------|--------|
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |

Step 22: Format the data as a table. As described earlier in this tutorial, you press Ctrl + T to format the data as a table, or from HOME > Format as Table. Since the data has headers, select My table has headers in the Create Table window that appears.

The 'Format As Table' dialog box is open, showing the range H\$A\$1:\$E\$48 and the checkbox 'My table has headers' is selected. The background shows the same table structure as the previous screenshot.

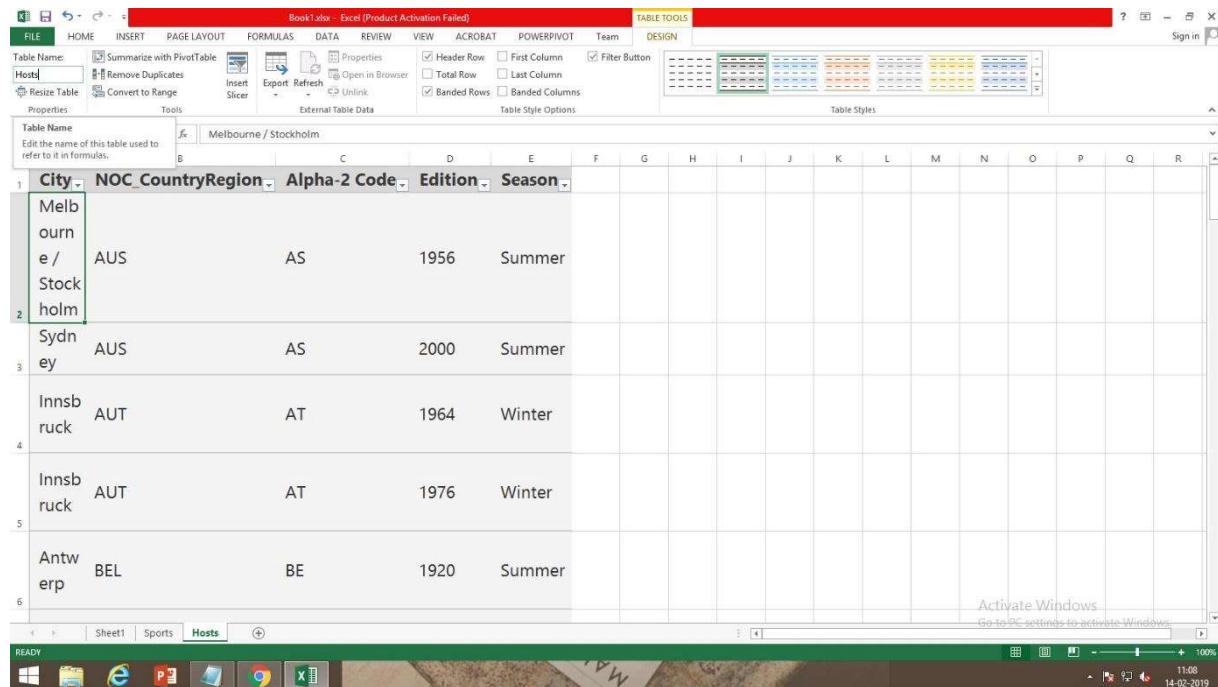
| City | NO | C_C | haountry | Edit | Sea | Melbour | ne/Stoc | AUS | AS | 1956 | Summer |
|------|----|-----|----------|------|-----|---------|---------|-----|----|------|--------|
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |



The screenshot shows a Microsoft Excel spreadsheet titled "Book1.xlsx". The ribbon is visible at the top with the "TABLE TOOLS" tab selected. A table is present in the worksheet, and the "DESIGN" tab of the ribbon is active. In the "Table Name" dropdown, the name "Hosts" is selected. The table data is as follows:

| | City | NOC | CountryRegion | Alpha-2 Code | Edition | Season |
|---|-----------|-----|---------------|--------------|---------|--------|
| 1 | Melbourne | AUS | Australia | AS | 1956 | Summer |
| 2 | Sydney | AUS | Australia | AS | 2000 | Summer |
| 3 | Innsbruck | AUT | Austria | AT | 1964 | Winter |
| 4 | Innsbruck | AUT | Austria | AT | 1976 | Winter |
| 5 | Antwerp | BEL | Belgium | BE | 1920 | Summer |
| 6 | | | | | | |

Step 23: Name the table. In TABLE TOOLS > DESIGN > Properties locate the Table Name field, and type Hosts.



The screenshot shows the same Microsoft Excel spreadsheet with the "DESIGN" tab still selected in the ribbon. The "Table Name" dropdown now contains the text "Melbourne / Stockholm". The table data remains the same as in the previous screenshot.

Step 24: Select the Edition column, and from the HOME tab, format it as Number with 0 decimal places.

The screenshot shows a Microsoft Excel spreadsheet titled "Book1.xlsx". The data consists of six rows of information. The columns are labeled "City", "NOC", "Country", "Region", "Alpha-2 Code", "Edition", and "Season". The "Edition" column contains the years 1956, 2000, 1964, 1976, 1920, and 1920. The "Season" column contains the words "Summer", "Summer", "Winter", "Winter", "Summer", and "Winter". The "Edition" column is currently selected. The "Number" button in the ribbon's "HOME" tab is open, displaying a list of number formats. The "0" decimal places option is highlighted. The status bar at the bottom right shows the date as 14-02-2019 and the time as 11:11.

Step 25: Save the workbook. Your workbook looks like the following screen.

This screenshot shows the same Excel spreadsheet after saving. The "Edition" column now displays the years as integers (1956, 2000, 1964, 1976, 1920, 1920) instead of dates. The rest of the data remains the same. The status bar at the bottom right shows the date as 14-02-2019 and the time as 11:12.

Step 26: On Sheet1, at the top of PivotTable Fields, click All to view the complete list of available tables.

The screenshot shows a Microsoft Excel window with the 'PIVOTTABLE TOOLS' ribbon tab selected. A PivotTable is displayed on the worksheet, showing medal counts by sport and country. To the right, the 'PivotTable Fields' pane is open, showing a tree view of available fields. The 'ACTIVE' section is expanded, and the 'ALL' button is highlighted. Below it, the 'Choose fields to add to report:' section is visible, showing various categories like Disciplines, Medals, Events, Hosts, S_Teams, Sports, and W_Teams. The 'Drag fields between areas below:' section shows the current field assignments: 'Medal' is in the 'FILTERS' area under 'ROWS', and 'NOC_Country...' is in the 'COLUMNS' area. The 'Discipline' field is in the 'ROWS' area under 'VALUES', and 'Count of Medal' is also in the 'VALUES' area.

Step 27: Expand Sports and select Sport to add it to the PivotTable. Notice that Excel prompts you to create a relationship, as seen in the following screen.

This screenshot shows the same Excel environment as the previous one, but the 'Sports' category under the 'ALL' section is now expanded. A 'CREATE...' button is visible next to the 'Relationships between tables may be needed.' message. The 'Sport' field is now listed under the 'ROWS' section in the 'VALUES' area of the 'PivotTable Fields' pane. The rest of the field assignments remain the same as in the previous screenshot.

Step 28: Click CREATE, in the highlighted PivotTable Fields area to open the Create Relationship dialog.

The screenshot shows a Microsoft Excel interface with a PivotTable Fields dialog box overlaid. The dialog box is titled 'Create Relationship' and asks to pick tables and columns for a relationship. It has dropdowns for 'Table' (set to 'Sports'), 'Column (Foreign)', 'Related Table' (set to 'Sport'), and 'Related Column (Primary)'. Below the dialog, the main Excel window displays a PivotTable with columns for Medal, Discipline, and various countries. The PivotTable Fields pane on the right shows 'Sports' and 'Sport' listed under 'ACTIVE'.

Step 29: In Table, choose Disciplines from the drop down list.

In Column (Foreign), choose SportID.

In Related Table, choose Sports.

In Related Column (Primary), choose SportID.

Click OK.

[Tutorial: Import Data into Excel](https://support.office.com/en-us/article/tutorial-import-data-into-excel-and-create-a-data-model-4b4e5ab4-60ee-465e-8195-09ebba060bf0)

imported. Let's create the relationship.

4. Click **CREATE...** in the highlighted **PivotTable Fields** area to open the **Create Relationship** dialog, as shown in the following screen.

5. In **Table**, choose **Disciplines** from the dropdown.

6. In **Column (Foreign)**, choose **SportID**.

7. In **Related Table**, choose **Sports**.

8. In **Related Column (Primary)**, choose **SportID**.

9. Click **OK**.

The PivotTable changes to reflect the new relationship. But the PivotTable doesn't look right quite yet, because of the ordering of fields in the **ROWS** area. Discipline is a subcategory of a given sport, but since we arranged Discipline above Sport in the **ROWS** area, it's not organized properly. The following screen shows this unwanted ordering.

Step 30: In the ROWS area, move Sport above Discipline. That's much better, and the PivotTable displays the data how you want to see it, as shown in the following screen.

| Sport | Country | Medal Count | | | | | | | | | | Grand Total |
|--------------------|-----------|-------------|------------|------------|------------|------------|------------|------------|------------|------------|-------------|-------------|
| | | CHN | FRA | GER | HUN | ITA | NED | RUS | URG | USA | Grand Total | |
| Aquatics | 60 | 1 | 24 | 9 | 24 | 14 | 131 | | | 263 | | |
| Diving | 60 | 1 | 24 | 9 | 24 | 14 | 131 | | | 263 | | |
| Archery | 51 | 15 | 46 | 6 | 12 | 9 | 1 | 7 | 52 | 199 | | |
| Archery | 51 | 15 | 46 | 6 | 12 | 9 | 1 | 7 | 52 | 199 | | |
| Fencing | 44 | 19 | 283 | 51 | 226 | 328 | 24 | 41 | 145 | 48 | 1209 | |
| Fencing | 44 | 19 | 283 | 51 | 226 | 328 | 24 | 41 | 145 | 48 | 1209 | |
| Skating | 4 | 26 | 18 | 45 | 12 | 9 | 78 | 37 | 102 | 124 | 455 | |
| Figure skating | 3 | 7 | 18 | 11 | 12 | 2 | 3 | 29 | 42 | 51 | 178 | |
| Speed skating | 1 | 19 | 34 | 7 | 75 | 8 | 60 | 73 | | | 277 | |
| Grand Total | 99 | 120 | 348 | 126 | 238 | 358 | 111 | 103 | 268 | 355 | 2126 | |