

INTEGRATION

1

Office: Designed for Integration



Each product in the Office lineup is designed for a specific type of task. However, the products are also designed to work together. For example, you can create charts in Excel and display them in Word or PowerPoint, or create a table in Word and import it into Excel. In this chapter, you will explore the many features in Office that enhance your productivity and make multitasking easy.

LEARNING OBJECTIVES

- ▶ Transfer information between Office apps
- ▶ Use Excel to create charts from Access
- ▶ Convert a Word outline to a PowerPoint presentation
- ▶ Present Excel charts in PowerPoint
- ▶ Use Outlook to send documents

Project: Submitting a Quarterly Report

You are the lead financial project manager for a multimillion-dollar Hollywood film studio. Among other things, you're in charge of keeping track of studio expenses, budgets for each film project, studio revenue, and other company profits and losses. You're responsible for saving the studio as much money as possible by keeping in contact with talent agencies, possible donors, and distribution companies.

Due in part to your diligence, the studio has benefited from several profitable consecutive fiscal quarters. At the end of another successful three months, your phone buzzes with a reminder notification. It's time to create and submit the latest quarterly report.

Getting Organized

You track the studio financial data in several Office programs. The CEO prefers to receive the reports in a PowerPoint presentation, but you use other Office programs to sort and prepare the information. To make sure you cover all the necessary steps, you open the OneNote app on your phone to jot down a to-do list with the apps you'll be using to create the report.

1. Export profit and loss data (Access, Excel).
2. Sort and chart profit and loss data (Excel).
3. Chart merchandise revenue by country data (Word, Excel).
4. Display all results in a PowerPoint presentation (Word, Excel, PowerPoint).
5. Send the presentation to the studio CEO (PowerPoint, Outlook).

Each task requires a different app or combination of apps. Because the Office products are designed to work together seamlessly, you'll easily transfer data between apps as you work to accomplish each task.

Copying Data from Access to Excel

You keep the profit and loss data in an Access database. Your first step is to use that database to generate a profit and loss report for later use in other programs.

DEVELOP YOUR SKILLS: I1-D1

In this exercise, you will use Access to generate a report that you can export to Excel and other programs.

1. Start Access and open **I1-D1-ProfitLossData** from your **Integration Chapter 1** folder. If necessary, click **Enable Content** in the yellow Security Warning bar.
2. Under the All Access Objects panel on the left, double-click the **2021 Q4 Project Profit Loss Data** table.

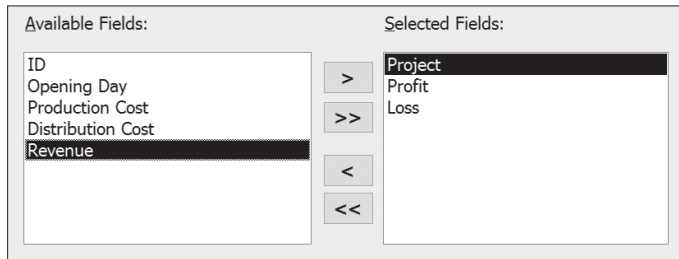
In this table, you'll see the forty-seven film projects the studio has completed during Quarter 4 of 2021, the production and distribution costs, the revenue, and the profit and loss data for each project. Access makes it easy to export this data to other Office apps, such as Excel.

Create a Profit and Loss Report

3. Choose **Create**→**Reports**→**Report Wizard**  to begin a report using the data in the table.

The Report Wizard dialog box appears.

4. In the Available Fields box, double-click **Project**, **Profit**, and **Loss** to move them into the Selected Fields box.



5. Click **Next**.

The grouping screen appears.

6. You will group the information in Excel, so leave the grouping as is and click **Next**.

7. You will sort the information in Excel, so leave the sorting as is and click **Next**.

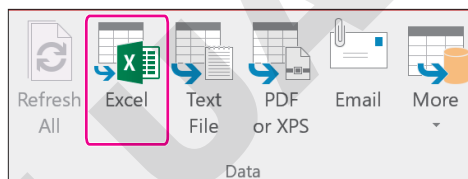
The Wizard recognizes your criteria and automatically suggests the tabular layout option for your report.

8. Click **Next** to accept the tabular report layout.

9. In the final Wizard screen, remove the default text and type **Profit/Loss Data for 2021 Q4 Report** as the report title, leave selected the option labeled *Preview the Report*, and click **Finish**.

Organizing the data into an Access report, as you've done here, will make sorting and charting the data in Excel easier.

10. Choose **Print Preview**→**Data**→**Excel** to begin the export process to Excel.



You have several options for exporting the report, including creating a PDF file or starting an email.

11. In the Export window, browse to your student data files folder. Type **I1-D1-ProfitLossSpreadsheet** in the File Name box and click **Save**.

12. Check the **Open the Destination File After the Export Operation Is Complete** box and click **OK**.

Excel will automatically open.

13. Return to Access. Close any open dialog boxes and click **Save** .

*There are other ways to share Access data across Office apps. For example, you can run an Access query directly in Excel using the **New Query**→**From Database**→**From Microsoft Access Database** button under the **Data** tab in Excel. You can also run queries from multiple other sources using this tool.*

14. Close Access and switch to Excel.

Sorting and Charting Data in Excel

Now that you've placed the Access data into Excel, you'll use it to generate the charts you'll need for your quarterly report.

DEVELOP YOUR SKILLS: I1-D2

In this exercise, you will first convert the data into an Excel table. This will make the sorting and filtering process easier. Then you'll sort, filter, and chart the information.

1. Save your file as: **I1-D2-ProfitLossSpreadsheet**

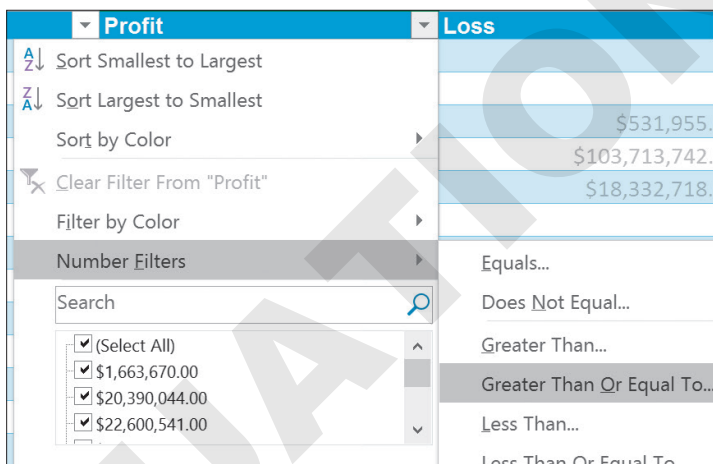
2. Choose **Insert**→**Tables**→**Table** .

In the Create Table dialog box that appears, Excel automatically detects the borders of your table.

3. Leave **My Table Has Headers** checked and click **OK**.

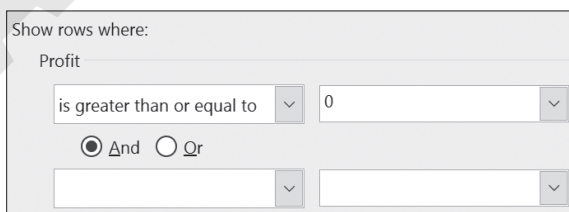
Excel converts the range into a table in which you can easily sort and filter the information before creating charts.

4. In **cell B1**, click the **Profit** menu button  to show the sorting and filtering options for the Profit column and then choose **Number Filters**→**Greater Than Or Equal To**.



For now, you want to see only the projects that made a profit. The easiest way to do this is to filter out any projects with no data in the profit cells. Therefore, you'll filter the table to show only projects with the profit cells greater than zero.

5. In the Custom AutoFilter dialog box, enter **0** in the box next to *Is greater than or equal to* and click **OK**.



Notice that the Profit menu button is now a filter button. Excel will filter out any projects with 0 in the profit box or, in other words, any cells without profit data.

- To sort the newly filtered data, click the **Profit** button (in cell B1) and choose **Sort Smallest to Largest**.

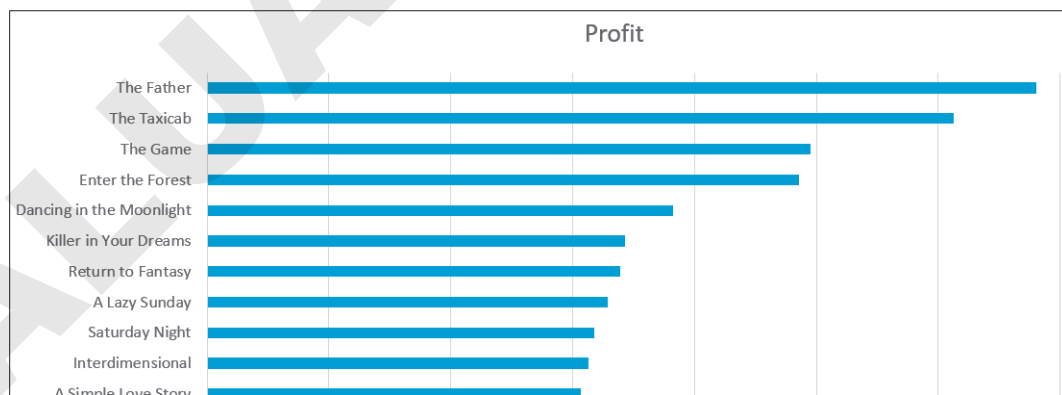
Excel sorts the filtered information.

	A	B	C
1	Project	Profit	Loss
2	The Queen and the Peasant	\$1,663,670.00	
3	Dancing with a Prince	\$20,390,044.00	
7	Don't Tell Mom	\$22,600,541.00	
9	Band Camp	\$28,068,448.00	
12	Team Spirit	\$33,650,397.00	
13	The Surprise	\$34,734,121.00	
14	Inglewood	\$35,060,487.00	
15	The Family of Families	\$36,258,818.00	
16	The Fight	\$38,777,211.00	
17	The Fantastic French Pheasant	\$38,997,875.00	
18	Dwarves and Orcs	\$39,321,367.00	
21	The Chance of a Lifetime	\$40,339,804.00	
22	Crazy for Her	\$47,487,363.00	
23	Wrinkles	\$49,683,250.00	
25	The Roof is Frozen	\$55,411,445.00	

Chart the Information

Now that you've sorted and filtered the information you need, you'll create a chart for easy visual reference.

- Select the **range A1:B47**.
- Choose **Insert**→**Charts**→**Recommended Charts**.
- Click **OK** to accept the recommended Clustered Bar chart.
- Once the chart has been inserted, choose **Chart Tools**→**Design**→**Location**→**Move Chart**.
- In the Move Chart dialog box, select **New Sheet** to move the chart to a new sheet, leave the default name of *Chart1*, and click **OK**.



- Save the file and leave it open. If a Compatibility Checker dialog box appears, click **Continue**.

Copying Data from Word to Excel

Your assistant keeps track of which movies get the most revenue in merchandising, how merchandising does in certain countries, and how much of the merchandising revenue is the result of direct sales to theaters. For each quarterly report, he emails you the information in a Word document.

DEVELOP YOUR SKILLS: I1-D3

In this exercise, you will import the data your assistant has emailed to you into Excel for easy sorting and charting. You will use delimiters to convert the data from a word-processing format to a spreadsheet format. Finally, you'll chart the information.


1. Start Word and open **I1-D3-CountryRevenue** from your file storage location.

The document is divided into columns and rows using **Tab** and **Enter**. To see these formatting marks more clearly, choose **Home**→**Paragraph**→**Show/Hide ¶**. This type of consistent formatting is essential to making delimiters work.

To import the data into Excel, the document must first be saved as a plain text file.

2. Choose **File**→**Save As**→**Browse** and, if necessary, browse to your file storage location.
3. From the Save as Type drop-down menu, choose **Plain Text** and click **Save**.
4. In the File Conversion dialog box, leave all default settings as they are and click **OK**.
5. Leave Word open and switch to Excel.

Import the Data into Excel

6. In Excel, click the **New Sheet**  button.
7. Select **cell A1** if it is not already selected.
8. Choose **Data**→**Get & Transform Data**→**From Text/CSV**.
9. Import the plain text version of **I1-D3-CountryRevenue** from your file storage location.
10. In the dialog box that appears, leave all default settings as they are and click **Load**.

I1-D4-CountryRevenue.txt			
File Origin		Delimiter	Data Type Detection
1252: Western European (Windows) ▾		Tab ▾	Based on first 200 rows ▾
Project	Country	Merchandise Revenue	Direct Sales Percentage
Dancing with a Prince	USA	525598	66.00%
Dancing with a Prince	Canada	561720	53.00%
Dancing with a Prince	Mexico	1817792	8.00%
Dancing with a Prince	Brazil	2739459	64.00%

Delimiters use consistent characters to separate data into Excel columns. They can work with various separators, including spaces, commas, and, in this case, tabs. Experiment by selecting options besides **Tab** in the **Delimiter** drop-down menu and notice that the preview at the bottom of the window changes with your selection. Before moving on, reselect **Tab**.

Excel imports and separates the data according to the delimiters specified. When doing this, Excel automatically creates a new sheet, which you'll now rename.

11. Double-click **Sheet2**, rename it **Merchandise data by country**, and press **Enter**. If a Queries & Connections panel appears, close it.

Note!

The number of your newly created sheet may vary.

12. Save the file as **I1-D3-CountryRevenue** and leave it open. If a Compatibility Checker dialog box appears, click **Continue**.

Chart the Data

Now that you've imported the data, you'll need to organize it to see only totals for each project and chart the data for the quarterly report.

13. Select the **range C2:C612**.

Rather than selecting this long range by clicking and dragging, select the first cell, C2, and then press **Shift**+**Ctrl**+**↓**. Normally, the down arrow **↓** simply moves your selection one cell down, but, when combined with **Ctrl**, it moves your selection to the bottom of the range. Adding **Shift** selects the cells as well.

14. Apply the Accounting format to the selected range by choosing **Home**→**Number**→**Accounting Number Format** .

15. Click the **Decrease Decimal**  button twice to remove decimal places.

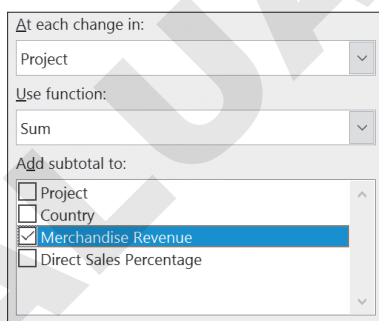
16. Click anywhere in the table to select a single cell and choose **Table Tools**→**Design**→**Tools**→**Convert to Range**. Click **OK** in the warning box.


Converting the table to a range allows you to create an outline of the material.

17. Press **Ctrl**+**A** to select the entire range of data and choose **Data**→**Outline**→**Subtotal**.

18. In the Subtotal dialog box that appears, uncheck **Direct Sales Percentage**, check **Merchandise Revenue**, and click **OK**.

The settings in the Subtotal dialog box specify where you want the groupings to occur, as well as which function and which column you want to use. In this case, you're grouping by project, using the SUM function and merchandise revenue numbers.



19. Click the **Subtotal**  button at the top-left corner of the spreadsheet to collapse the information to the second level, or the totals in this case.

20. Right-click the **column B** header  and select **Hide** from the menu.

With column B hidden, columns A and C—the project names and merchandise revenue totals—are next to each other. This will make charting the information easy.

21. Select **cell C1** and then choose **Home**→**Editing**→**Sort & Filter**→**Sort Z to A** to sort the information from highest to lowest revenue.

22. Select the **range A1:C659** and choose **Insert**→**Charts**→**Insert Pie or Doughnut Chart** →**Pie** (first option, first row).

23. Choose **Design**→**Location**→**Move Chart**.

24. In the Move Chart dialog box, select **New Sheet** to move the chart to a new sheet, leave the default name of *Chart2*, and click **OK**.

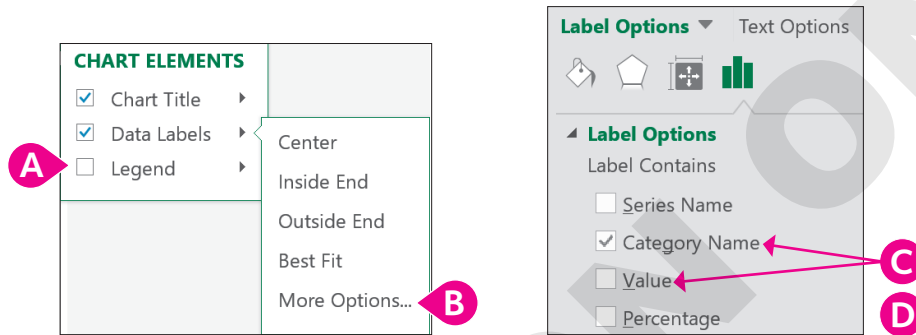
The data is difficult to understand in this chart. Instead of using the Legend, we'll use Data Labels to show the data more clearly.

25. Click the **Chart Elements**  button at the top right of the chart.



You may have to hover your mouse into the chart for the Chart Elements button to appear. The chart must also be selected.

26. Follow these steps to format the chart elements:

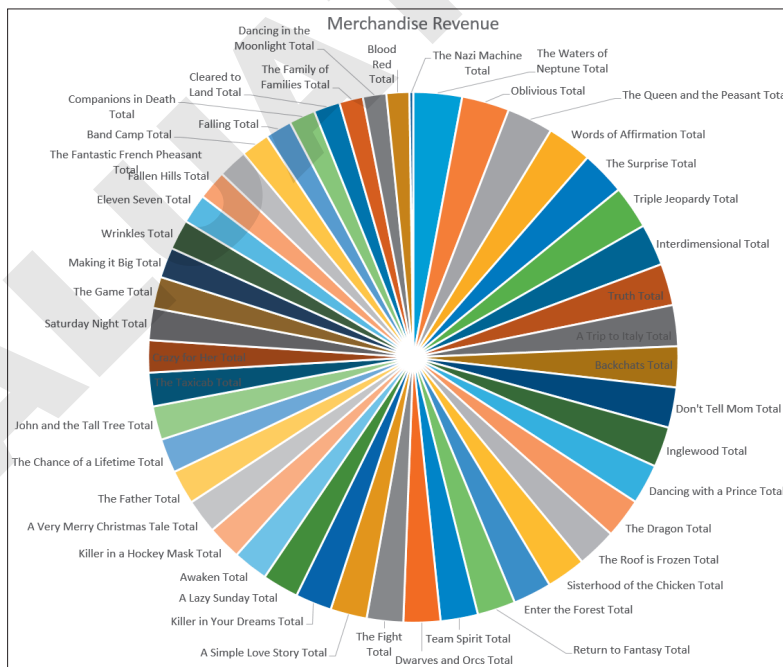


A Uncheck **Legend**.

B Choose **Data Labels** menu button ▼→**More Options**.

C In the Format Data Labels panel under Label Options, check **Category Name** and uncheck **Value**.

D Close the Format Data Labels panel.



Your final pie chart showing Merchandise Revenue should look similar to the provided image, but there may be slight differences depending on your screen resolution and other factors.

27. **Save**  the file and leave it open. If a Compatibility Checker dialog box appears, click **Continue**.

Creating the PowerPoint Presentation

Now that you've created all the charts you need, you'll create a PowerPoint presentation and combine the information you've gathered into a final report.

DEVELOP YOUR SKILLS: I1-D4

In this exercise, you'll use Word to create an outline for your presentation and then you'll import the outline directly into PowerPoint. Finally, you'll copy all the charts you need from Excel into your final quarterly report presentation.

Tip!

For PowerPoint to properly import your outline, you must use the Word styles exactly as shown. To increase the indentation of a bulleted line, place the insertion point before the first word in the line and press **Tab**.

1. Switch to Word, open a new **Blank Document**, and type this outline as shown and using the styles listed.

2021 Q4 Quarterly Report Title style

Profits

Losses

Merchandise Totals Heading 1 style

Takeaways

- Most profitable genre was fantasy
 - The Father was the 2nd biggest opening weekend we've ever had.
- Least profitable genre was horror
 - This is due mainly to the record-breaking losses from The Nazi Machine. Heading 2 style
 - No more big-budget historical fiction horror steampunk movies!

Tip!

When you press **Enter** at the end of a line, the style resets to Normal. This can be frustrating when you're creating the bulleted list with the Heading 2 style. To avoid this, you can type the entire outline in Normal style first and then go back and apply the styles.

2. Save the file to your file storage location as **I1-D4-PresentationOutline** and then close Word.


Import the Outline into PowerPoint

3. Open PowerPoint and choose the **Blank Presentation** template.
4. In the slide list panel to the left, right-click the **slide 1** thumbnail and choose **Delete Slide**.

Normally, you'd use this first slide to get started. However, your outline includes a title slide, rendering this title slide unnecessary.



5. To import the outline, choose **Home**→**Slides**→**New Slide menu button** ▼→**Slides from Outline**.
6. Browse to your file storage location and insert your saved Word document **I1-D4-PresentationOutline**.

PowerPoint uses the styles in the outline document to organize the presentation. Each Heading 1 style creates a new slide. Notice that slide 5 also includes the bulleted list made with Heading 2.

7. On slide 1, click in the **Click to Add Text** box and enter your name.
8. Select slides 2, 3, and 4 by clicking on **slide 2**, holding **[Shift]**, and selecting **slide 4**.
9. Choose **Home**→**Slides**→**Layout menu button** ▼→**Title and Content**.
By default, slides imported from a Word outline have the Title and Text layout. Because you're going to be importing images of your graphs, you'll need the ability to add pictures rather than text and so are switching to the Title and Content layout.
10. Select **slide 5**, select all text in **bullets 2** and **4–5** (press **[Ctrl]** while clicking and dragging through the text), and then choose **Home**→**Paragraph**→**Increase List Level**  to indent those bullets.









- Most profitable genre was fantasy
 - The Father was the 2nd biggest opening weekend we've ever had.
- Least profitable genre was horror
 - This is due mainly to the record-breaking losses from The Nazi Machine.
 - No more big-budget historical fiction horror steampunk movies!

Import Charts into PowerPoint

11. Switch to Excel, select the **Chart1** sheet, and then select the **bar chart**.
Click anywhere inside the bar chart to select it.
12. Choose **Home**→**Clipboard**→**Copy** .
13. Switch to PowerPoint, select **slide 2**, and then select the content box as an object.
In PowerPoint, you can select an item as an object or as a text tool. In this case, we want to select the content box as an object by clicking anywhere along its outside edge. When selected, the content box has a solid edge, as opposed to a dashed line that shows when the item has been selected as a text tool.
14. Choose **Home**→**Clipboard**→**Paste menu button** ▼→**Use Destination Theme & Embed Workbook**  (first option) to paste the chart in place of the content box.
Be sure to use the Paste option to embed the chart so it will not change even if the source information changes. The default paste will change to reflect any changes made in the source Excel charts.

Tip!

You can use this same method to copy charts from Excel to Word or other Office apps.

15. Switch to Excel and select the **Profit Loss Data for 2021 Q4...** sheet.
You'll now change the data in the table to show only losses and create a Losses chart.
16. Click the **Filtered and Sorted**  button in **cell B1** and choose **Clear Filter from "Profit"** from the menu.
With the filter cleared, Excel will once again show all results, both profits and losses.
17. In **cell C1**, click the **Sort/Filter menu** button  to show the sorting and filtering options for the Loss column and choose **Number Filters**→**Greater Than Or Equal To**.
18. In the Custom AutoFilter dialog box, enter **0** in the box next to *is greater than or equal to* and click **OK**.
Just as before with profit data, Excel filters out any projects with 0 in the Loss box, or, in other words, any cells without loss data. Also, just as before, the menu button has changed to a filter button.
19. Once again in **cell C1** click the changed **Loss**  button and choose **Sort Largest to Smallest**.
20. Right-click the **column B**  header and select **Hide** from the menu.
21. Select the **range A1:C48** and choose **Insert**→**Charts**→**Recommended Charts**.
22. Click **OK** to accept the recommended Clustered Bar chart.
23. Choose **Design**→**Location**→**Move Chart** and move the chart to its own sheet. The name assigned to your sheet may vary.
24. Select the chart and choose **Home**→**Clipboard**→**Copy**.
25. Switch to PowerPoint, select **slide 3**, and then select the **content box** as an object.
26. Choose **Home**→**Clipboard**→**Paste menu button**  →**Use Destination Theme & Embed Workbook** .
27. Switch to Excel and select the **Chart2** sheet.
28. Select the **chart** and choose **Home**→**Clipboard**→**Copy**.
29. Switch to PowerPoint, select **slide 4**, and then select the **content box** as an object.
30. Choose **Home**→**Clipboard**→**Paste menu button**  →**Use Destination Theme & Embed Workbook** .
- If desired, use the skills learned in the PowerPoint chapter to add animations and transitions to the PowerPoint presentation.*
31. Save the presentation to your file storage location as: **I1-D4-2021Q4Report**
32. Close all applications. Save any unsaved files as you close them. Click **OK** on any compatibility boxes that appear.

Sending the Presentation with Outlook

You've completed your 2021 Q4 quarterly report and are ready to send it to the studio CEO.

DEVELOP YOUR SKILLS: I1-D5

In this final exercise, you'll use Outlook to send your report to the CEO.

1. Open Outlook.
2. Choose **Home**→**New**→**New Email** and fill out the fields as shown:



Send	To...	kleeds@ccstudios.com
	Cc...	
	Subject	2021 Q4 Report
The quarterly report is ready to go. It's attached.		
Thank you!		

3. Choose **Message**→**Include**→**Attach File menu button** ▼→**Browse This PC**.
4. Navigate to your file storage location and insert **I1-D4-2021Q4Report**.
The Recent Items list under the Attach File menu displays all recent files opened in various programs. If your desired file is in the Recent Items list, simply select it to attach it.
Outlook attaches the file to the email message. It shows just under the Subject box.
5. Click **Send** and then close Outlook.