

Module 6: Programming and Troubleshooting

Demo 1 – Solution

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Demo 1

- The task is to extract the Top 250 Movies list from IMDb. Following is the link for the same:

http://www.imdb.com/search/title?groups=top_250&sort=user_rating,desc

1. You have to extract the “title” of the movie, the “rating” for the movie and also the “URL”
2. Once you extract the List to your Data Table Variable, add a column to the Data Table variable named “Verdict”
3. Column “Verdict” should be filled with the following values for each of the movies
4. For ratings more than 9.0, it should have “Excellent”
5. For ratings between 8.5 and 9.0, the value should “Good”
6. For ratings below 8.5, the value should be “Average”



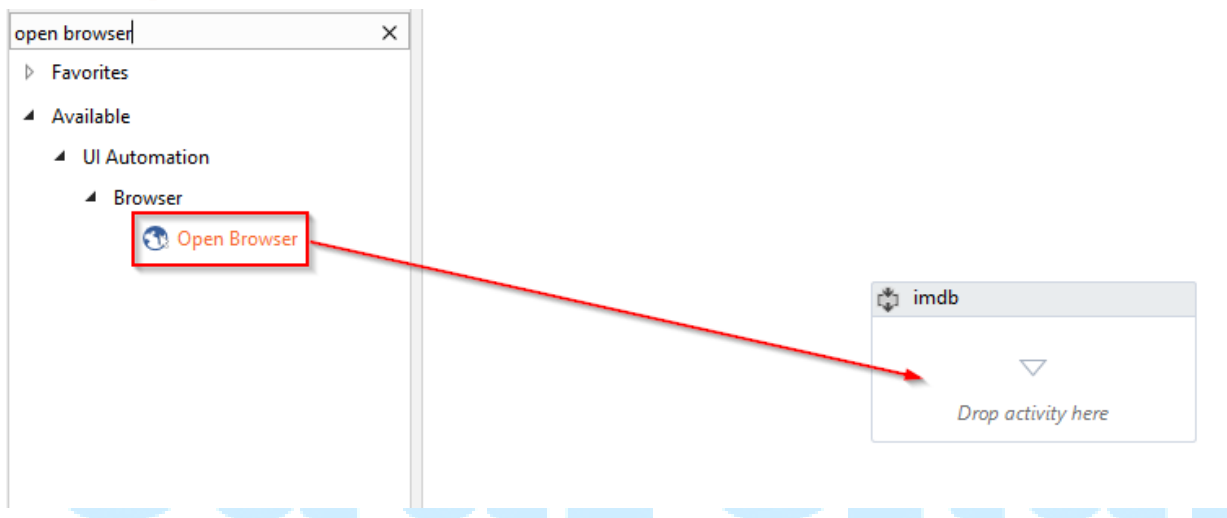
IMDb List

| 1 | Name | URL | Rating | Verdict |
|---|-------------------------------|----------------|--------|-----------|
| 2 | The Shawshank Redemption | /title/tt01111 | 9.3 | Excellent |
| 3 | The Godfather | /title/tt00686 | 9.2 | Excellent |
| 4 | The Dark Knight | /title/tt04685 | 9 | Excellent |
| 5 | The Godfather: Part II | /title/tt00715 | 9 | Excellent |
| 6 | Pulp Fiction | /title/tt01109 | 8.9 | Good |
| 7 | The Lord of the Rings: The Re | /title/tt01672 | 8.9 | Good |

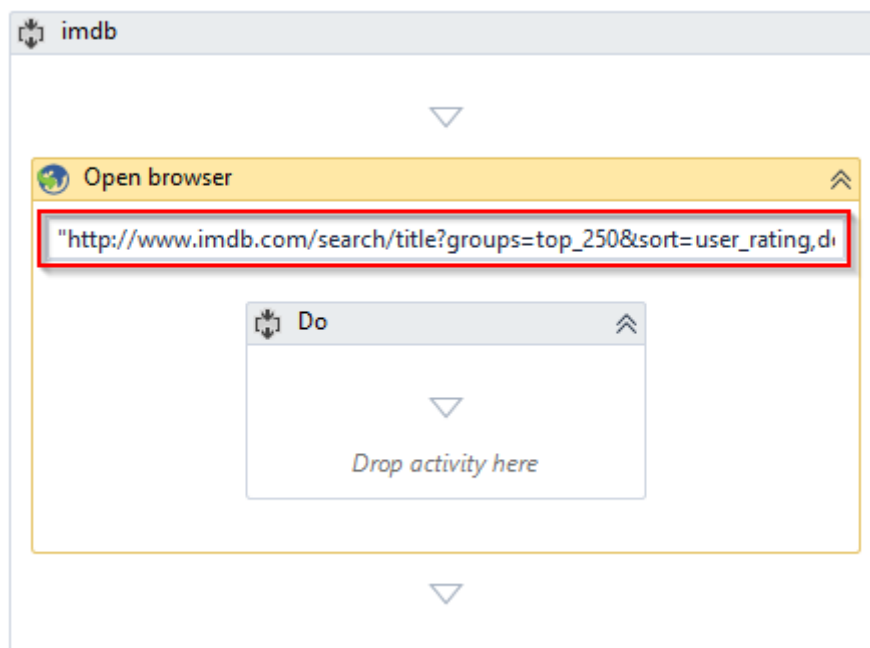
Output

Demo 3 – Solution

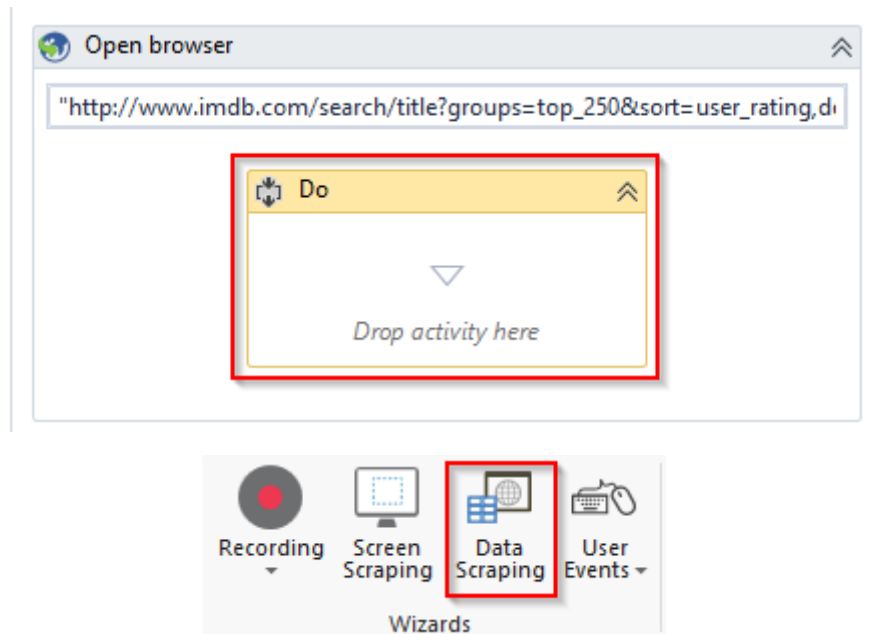
- **Step 1:** Create a blank project and, on the Design tab, in the File group, select New -> Sequence. The New **Sequence** Diagram window is displayed. Give a name to the **Sequence**.
- **Step 2:** Drag and Drop the **Open Browser Activity** in your sequence.



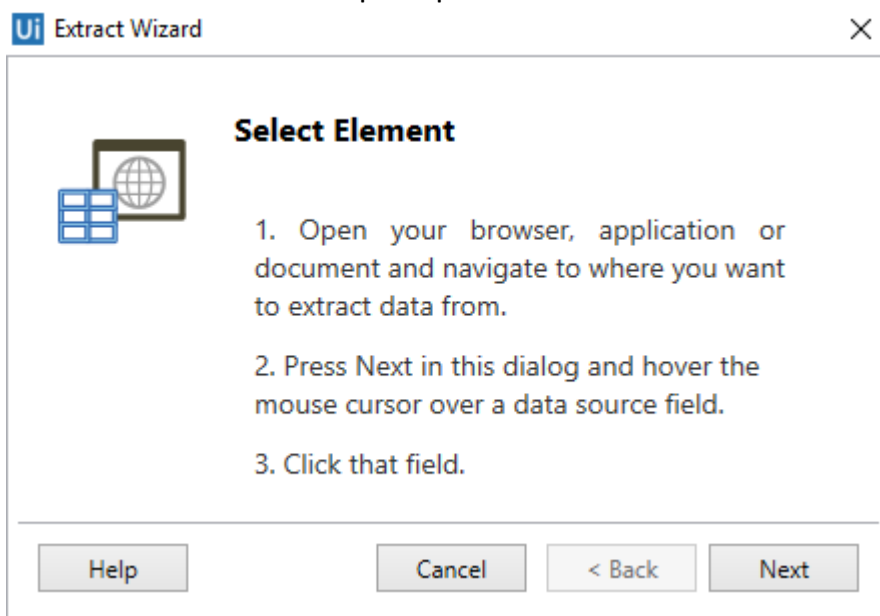
1. Enter the following URL in the Open Browser activity.



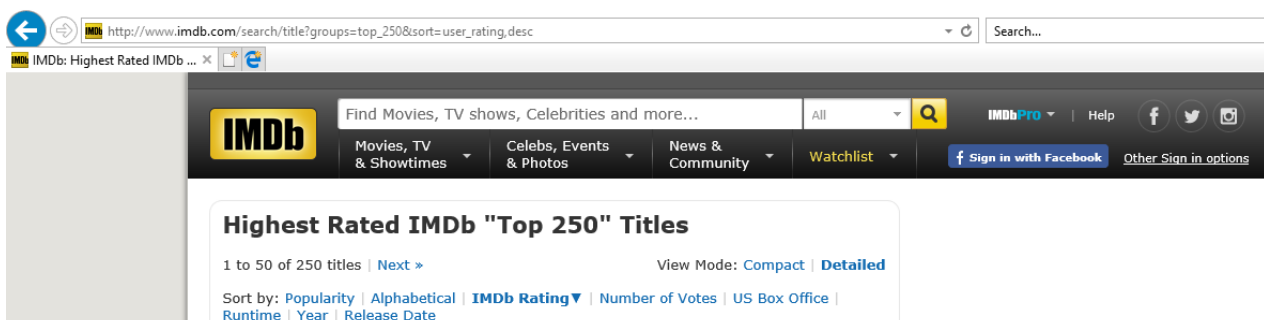
- **Step 3:** Select the **Do** container of the Open Browser Activity and click on **Data Scraping**.

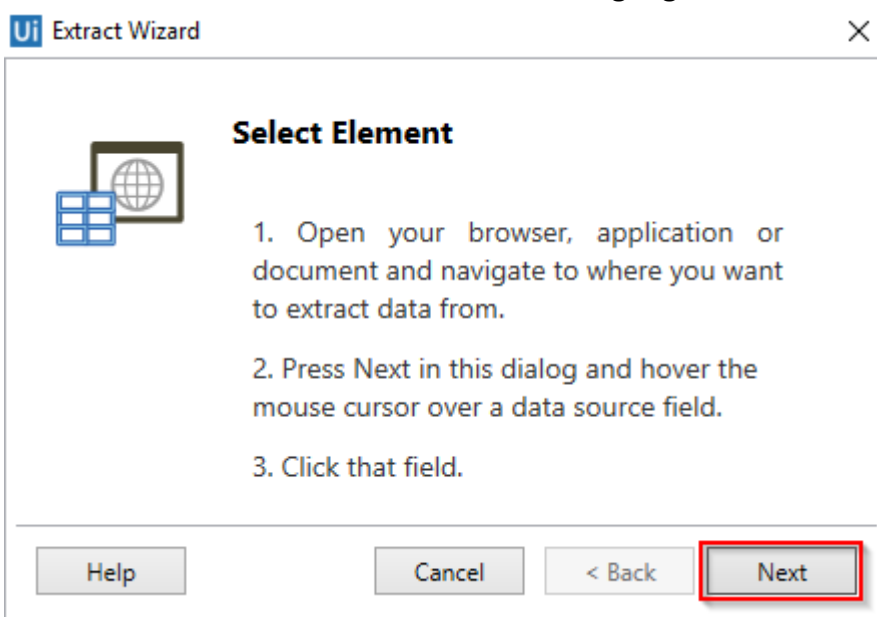


1. You will be prompted with the **Extract Wizard**.



2. Go to the URL you provided in the **Open Browser Activity**



3. On the **Extract Wizard**, click on **Next** and highlight a Movie's **Title**



1. **The Shawshank Redemption** (1994)

R | 142 min | Crime, Drama

★ 9.3 ☆ Rate this 80 Metascore

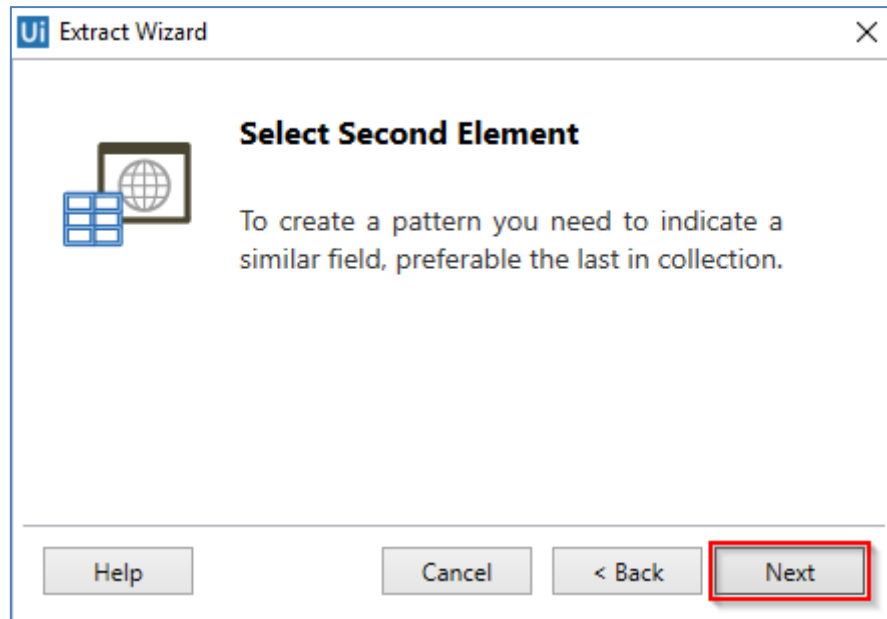
Two imprisoned men bond over a number of years, finding solace and eventual redemption through acts of common decency.

Director: Frank Darabont | Stars: Tim Robbins, Morgan Freeman, Bob Gunton, William Sadler

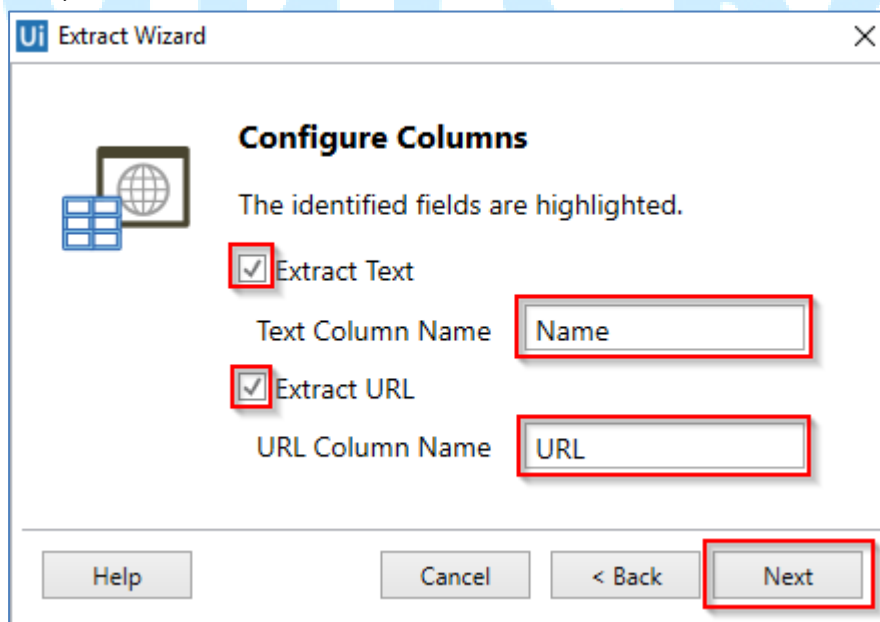
Votes: 1,876,936 | Gross: \$28.34M



- Click on **Next** and highlight the next movie's title to create a pattern



- Set Column Names and Check on **Extract URL** and Set its Column name to **URL**, click on **Next**



6. Set the **Maximum number of results** to **250** and click on **Extract Correlated Data**

| | |
|---------------------------------------|----------------------------------|
| The Lord of the Rings: The Two Towers | /title/tt0167261/?ref_=adv_li_tt |
| Goodfellas | /title/tt0099685/?ref_=adv_li_tt |
| One Flew Over the Cuckoo's Nest | /title/tt0073486/?ref_=adv_li_tt |
| Seven Samurai | /title/tt0047478/?ref_=adv_li_tt |

Edit Data Definition Maximum number of results (0 for all)

Help Cancel < Back **Extract Correlated Data** Finish

7. Select the rating of a movie and click **Next**



1. The Shawshank Redemption (1994)

R | 142 min | Crime, Drama


★ **9.3** ☆ Rate this 80 Metascore


Two imprisoned men bond over a number of years, finding solace and eventual redemption through acts of common decency.

Director: [Frank Darabont](#) | Stars: [Tim Robbins](#), [Morgan Freeman](#), [Bob Gunton](#), [William Sadler](#)

Votes: 1,876,936 | Gross: \$28.34M

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 Extract Wizard

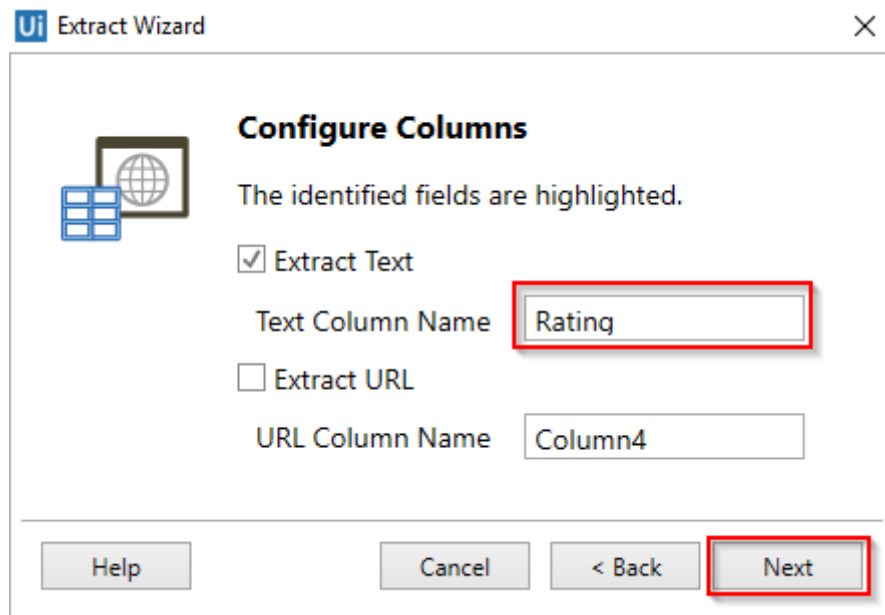


Select Second Element

To create a pattern you need to indicate a similar field, preferable the last in collection.

Help Cancel < Back **Next**

8. Click on another movie rating to create a pattern. Name the column as **Rating** and click on **Next**



The image shows a screenshot of the 'Ui Extract Wizard' dialog box, specifically the 'Configure Columns' step. The dialog has a title bar with 'Ui Extract Wizard' and a close button. Inside, there's a section titled 'Configure Columns' with a sub-header 'The identified fields are highlighted.' Below this, there are two options: 'Extract Text' (checked) and 'Extract URL' (unchecked). Under 'Extract Text', there is a text input field labeled 'Text Column Name' with the value 'Rating' entered. Under 'Extract URL', there is a text input field labeled 'URL Column Name' with the value 'Column4' entered. At the bottom, there are four buttons: 'Help', 'Cancel', '< Back', and 'Next'. The 'Next' button is highlighted with a red border.

Ui Extract Wizard

Configure Columns

The identified fields are highlighted.

☒ Extract Text

Text Column Name

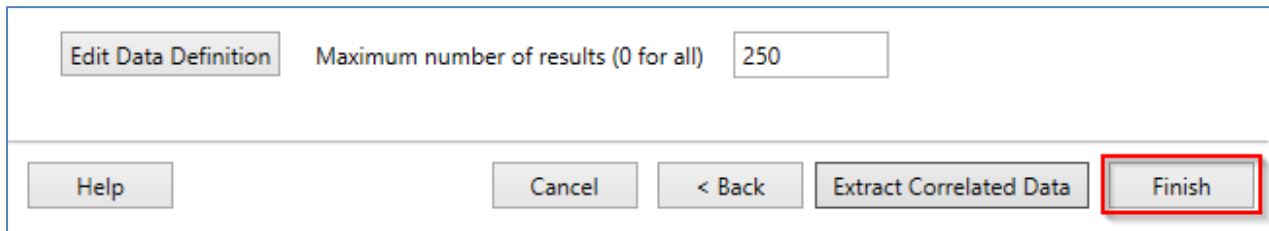
☐ Extract URL

URL Column Name

Help Cancel < Back **Next**

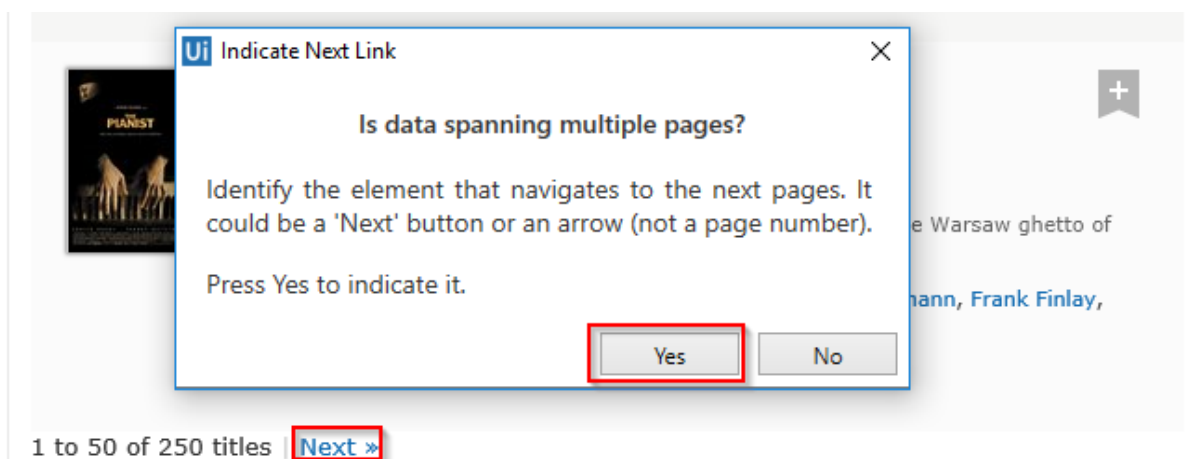
edureka!

9. Click on **Finish**.



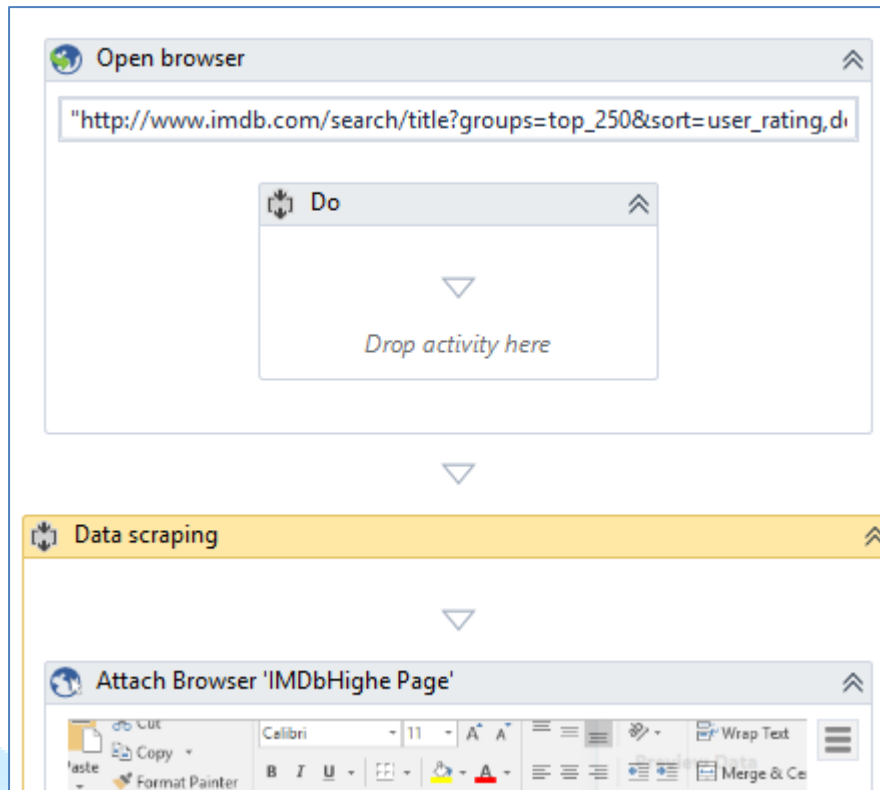
The screenshot shows a data extraction interface. At the top, there is a button labeled 'Edit Data Definition' and a text field labeled 'Maximum number of results (0 for all)' with the value '250'. Below this, there is a row of buttons: 'Help', 'Cancel', '< Back', 'Extract Correlated Data', and 'Finish'. The 'Finish' button is highlighted with a red rectangular box.

10. Click on **Yes** because data is spanning multiple pages and highlight the **Next** Button of the IMDB page

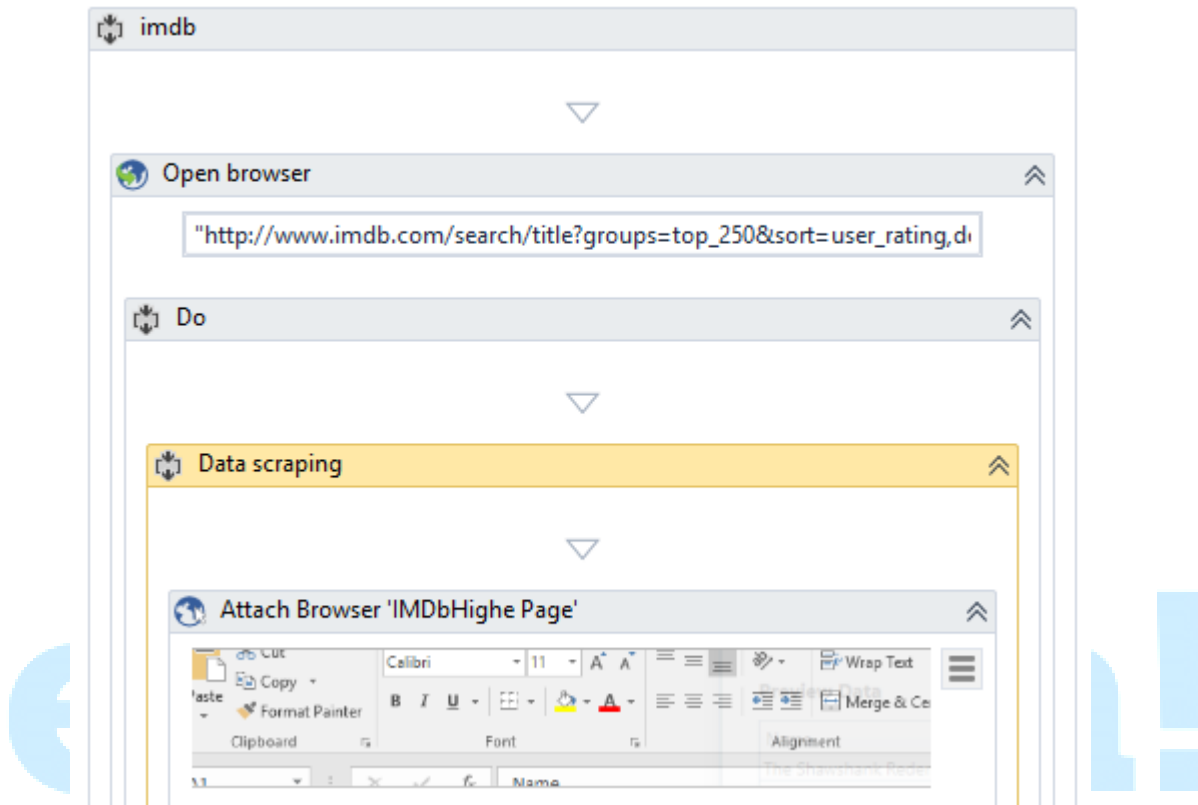


The screenshot shows an IMDb page with a dialog box titled 'Indicate Next Link' open. The dialog box contains the text: 'Is data spanning multiple pages? Identify the element that navigates to the next pages. It could be a 'Next' button or an arrow (not a page number). Press Yes to indicate it.' Below the text are two buttons: 'Yes' and 'No'. The 'Yes' button is highlighted with a red rectangular box. In the background, the IMDb page is visible, showing a movie poster for 'The Pianist' and a list of titles. The text '1 to 50 of 250 titles' is visible, followed by a 'Next »' link, which is also highlighted with a red rectangular box.

11. Your **Data Scraping** Sequence will look like this.

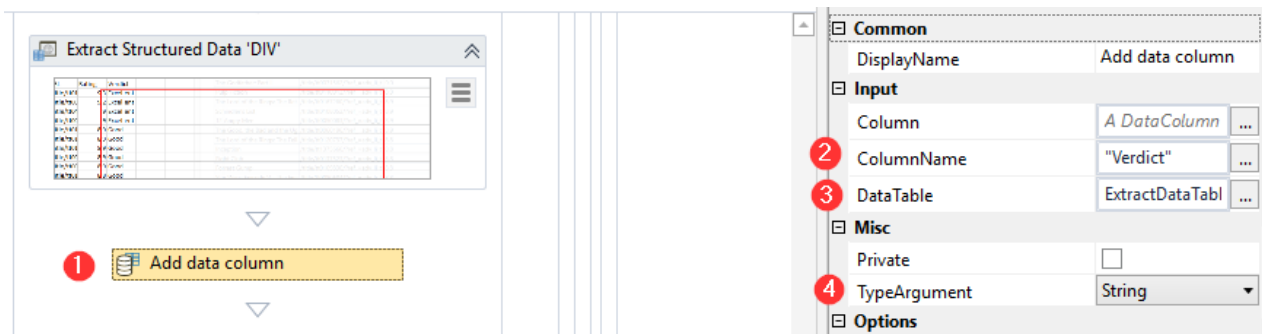


12. Move your Data Scraping Sequence into the Do container of the Open Browser Activity. You sequence should look like this:

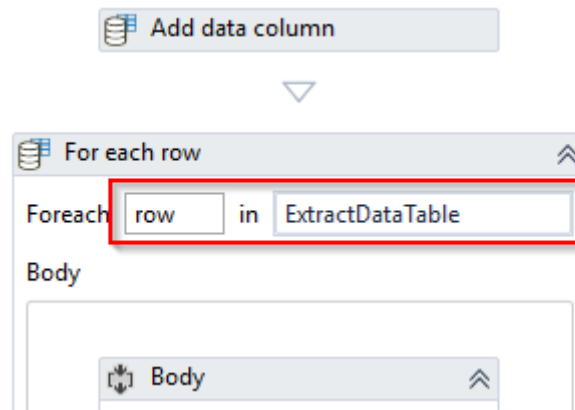


➤ **Step 4:**

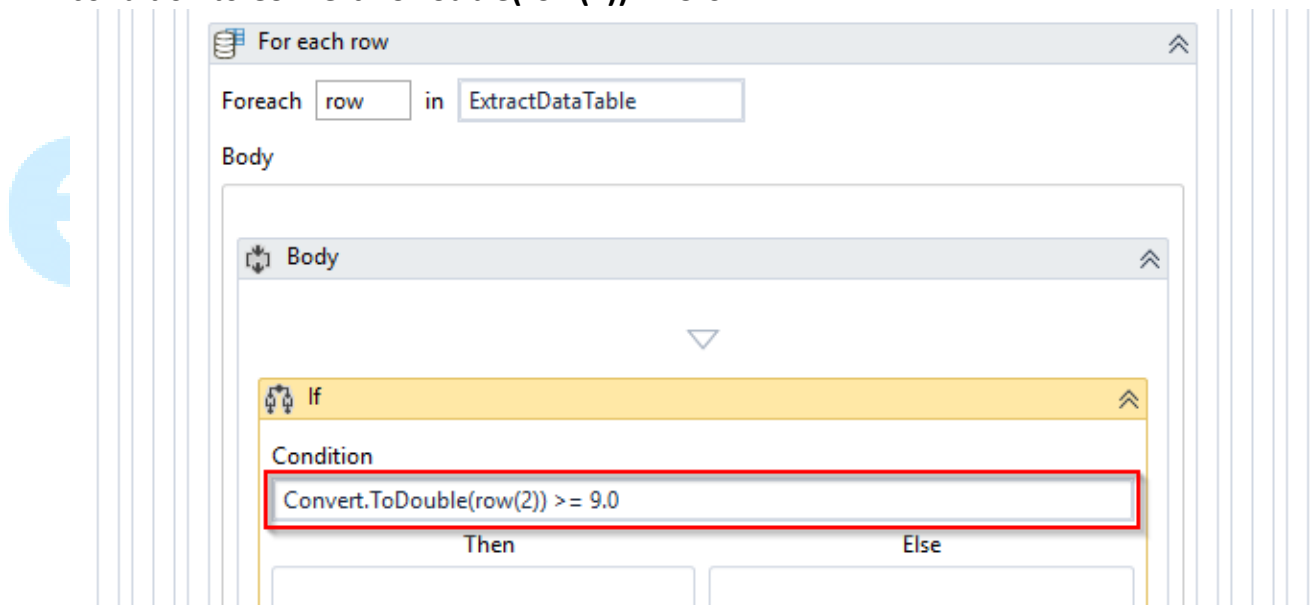
1. Back to your UiPath Studio, add an **Add Column** activity under Extract Structured Data activity.
2. In its Input Property, set **ColumnName** to **"Verdict"**
3. **DataTable** to **"ExtractDataTable"** variable
4. **TypeArgument** to **String**



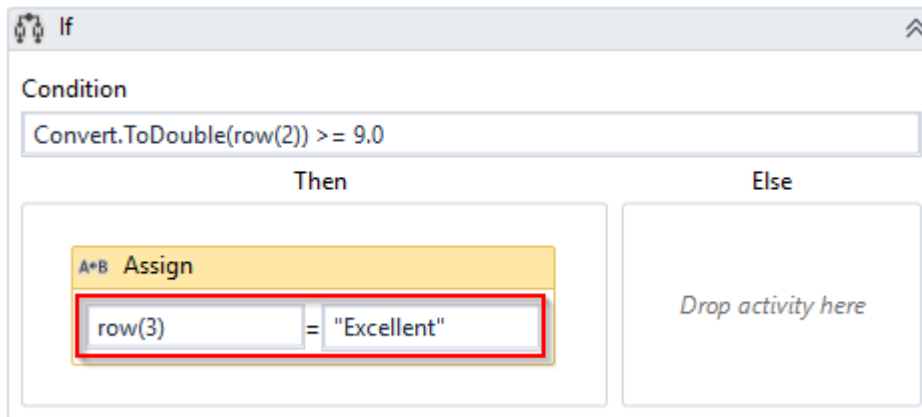
- **Step 5:** Now add a **For each row** activity after the **Add Data Column** activity and set the condition as For each **row** in **ExtractDataTable**:



- **Step 6:** In the body of For each row activity, add an **If** sequence and set the condition to **Convert.ToDouble(row(2)) >= 9.0**



- **Step 7:** Now add an **Assign** activity in the **then** condition of the **If** activity and set **row(3) = Excellent**.

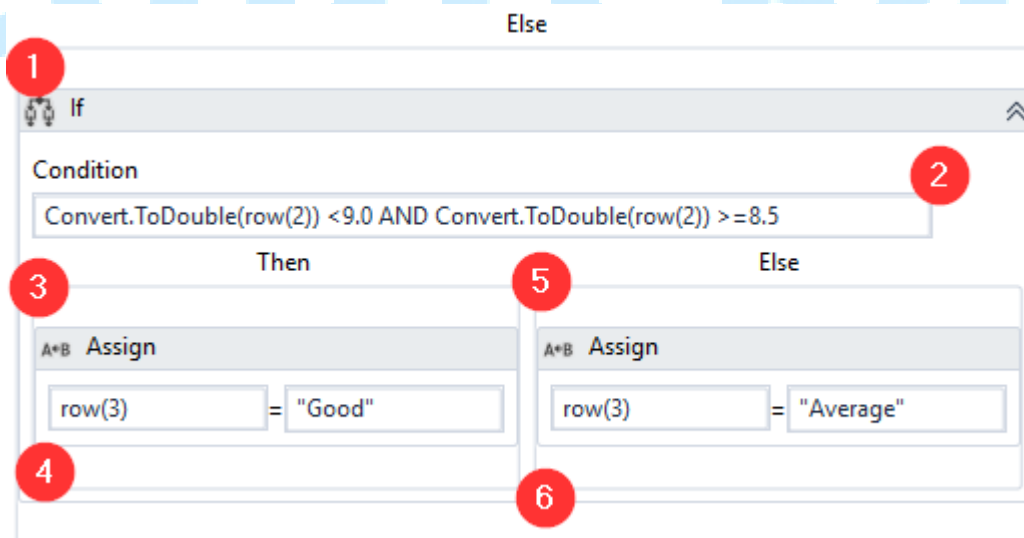


- **Step 8:** In the Else condition of the If activity:

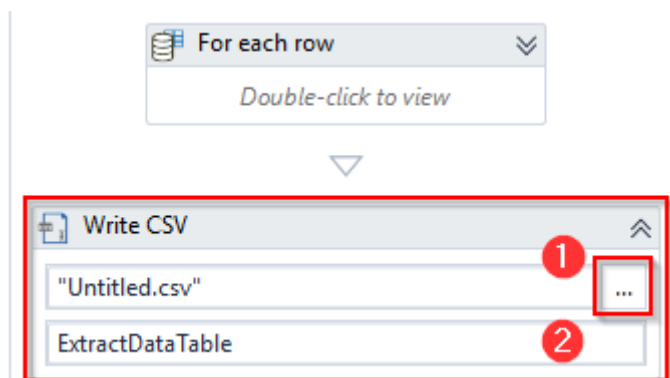
1. Add another **If** activity
2. Set its condition to :

Convert.ToDouble(row(2)) <9.0 AND Convert.ToDouble(row(2)) >=8.5

3. In its **Then** condition, add an **Assign** activity
4. Set **row(3) = "Good"** in that **Assign** activity
5. In the **Else** condition of the If, add an **Assign** activity
6. Set **row(3) = "Average"**



- **Step 9:** After the **For each row** activity, add a **Write CSV** activity:
1. Click on **Browse** button and select the CSV file where you want to store all the extracted data
 2. Set **ExtractDataTable** variable



- **Step 10:** Now run the project. You will see that all the top 250 IMDB movie's data is populated in the CSV file you specified with the specified column names.

| | A | B | C | D |
|----|--------------------------------|-------------|--------|-----------|
| 1 | Name | URL | Rating | Verdict |
| 2 | The Shawshank | /title/tt01 | 9.3 | Excellent |
| 3 | The Godfather | /title/tt00 | 9.2 | Excellent |
| 4 | The Dark Knight | /title/tt04 | 9 | Excellent |
| 5 | The Godfather | /title/tt00 | 9 | Excellent |
| 6 | Pulp Fiction | /title/tt01 | 8.9 | Good |
| 7 | The Lord of the Rings | /title/tt01 | 8.9 | Good |
| 8 | Schindler's List | /title/tt01 | 8.9 | Good |
| 9 | 12 Angry Men | /title/tt00 | 8.9 | Good |
| 10 | The Good, the Bad and the Ugly | /title/tt00 | 8.9 | Good |