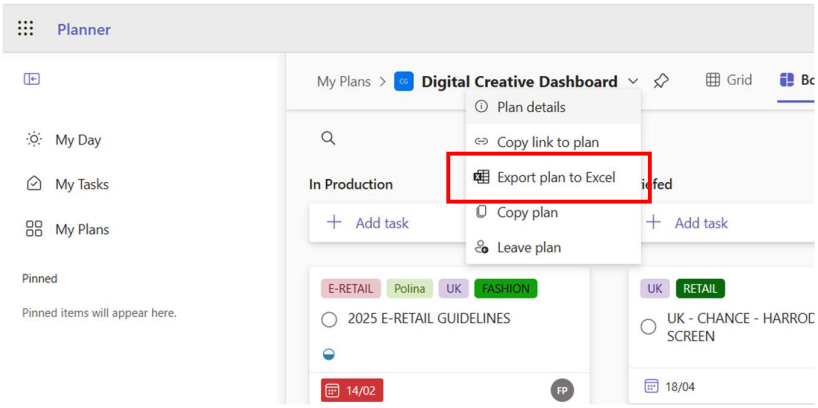
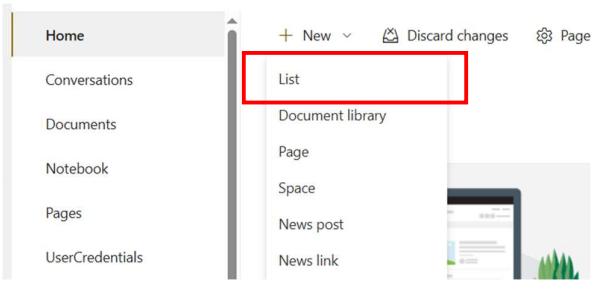
Setting up SharePoint List

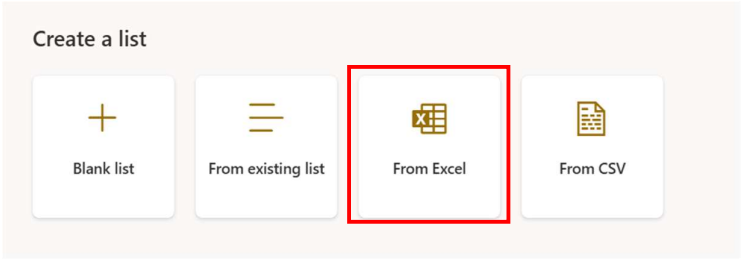
1. Open Microsoft Planner, click on this dropdown menu and select **Export plan to Excel** to generate the Excel version of the Planner.



2. Open SharePoint and create a new SharePoint list.

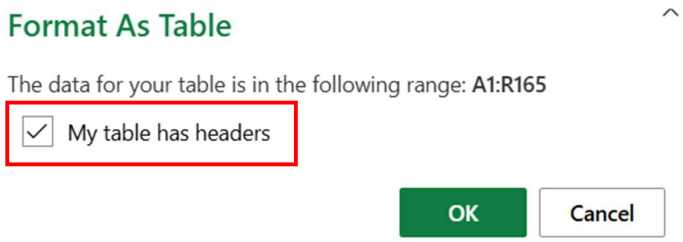


3. Select the **From Excel** option and use the Excel generated from Planner earlier.



4. Follow these four steps.

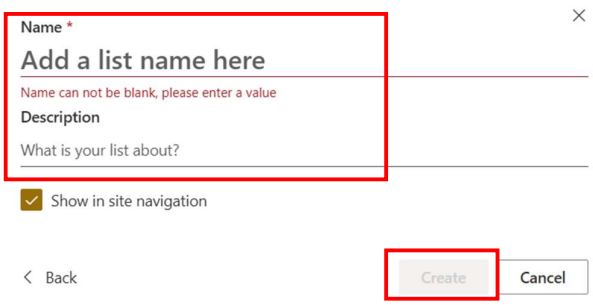
5. After clicking **Format as Table**, make sure to **check this box** so the first row will be read as column headers.



6. Update the **data type** for each field accordingly. Then, click on **Next**.

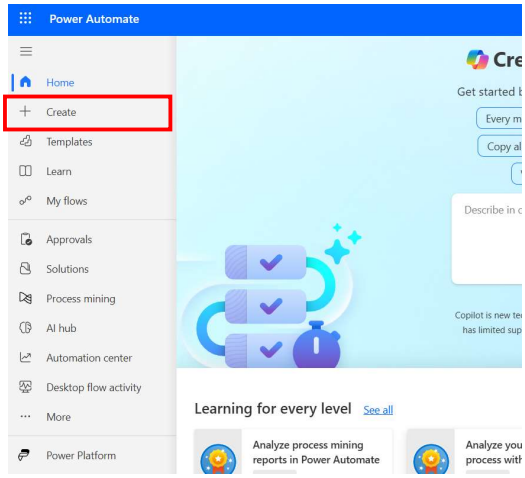
Column Names	Data Type
Task ID	Title
Task Name	Single line of text
Bucket Name	Single line of text
Progress	Single line of text
Priority	Single line of text
Assigned To	Single line of text
Created By	Do not import
Created Date	Date and time
Start Date	Date and time
Due Date	Date and time
Is Recurring	Choice
Late	Choice
Completed Date	Date and time
Completed By	Single line of text
Completed Checklist Items	Single line of text
Checklist Items	Multiple lines of text
Labels	Multiple lines of text
Description	Multiple lines of text

7. Name the list and give it a description if necessary. Then, click on **Create**.

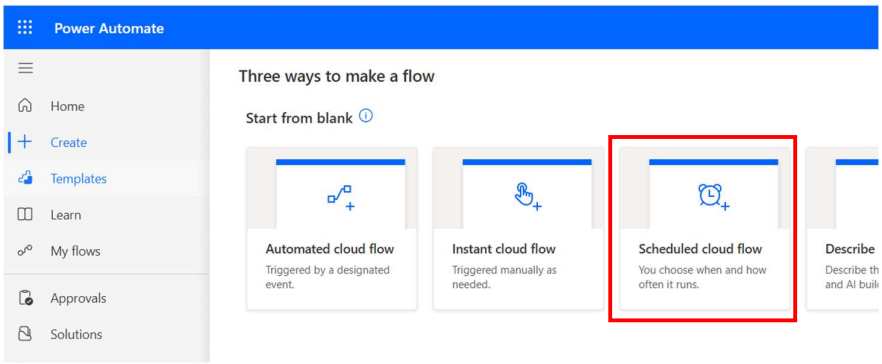


Setting up Power Automate Flow

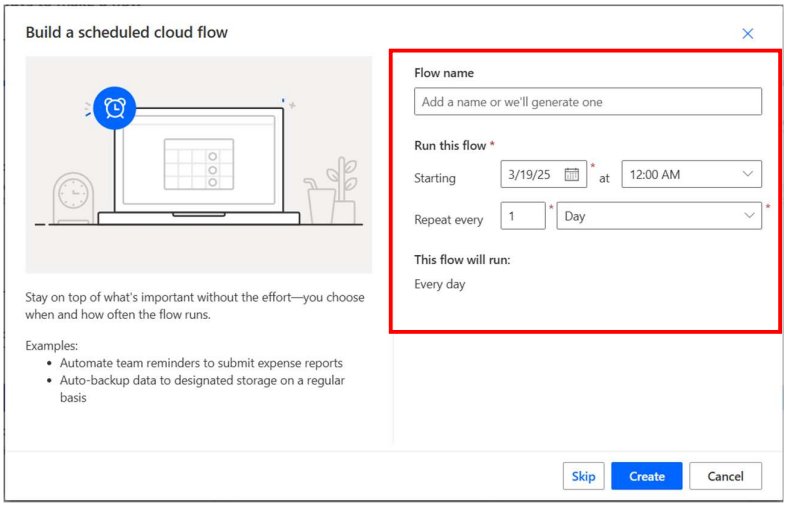
1. Open Power Automate from the Microsoft 365 portal. Then, click **Create**.



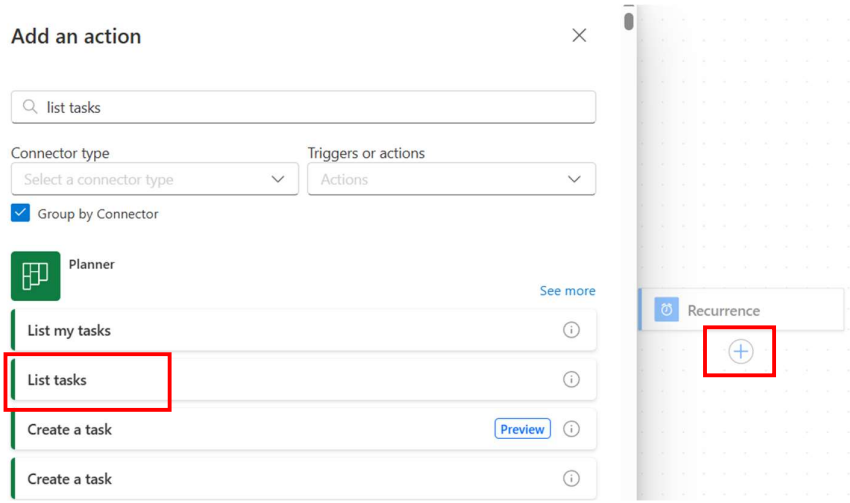
2. Select **Scheduled Cloud Flow**.



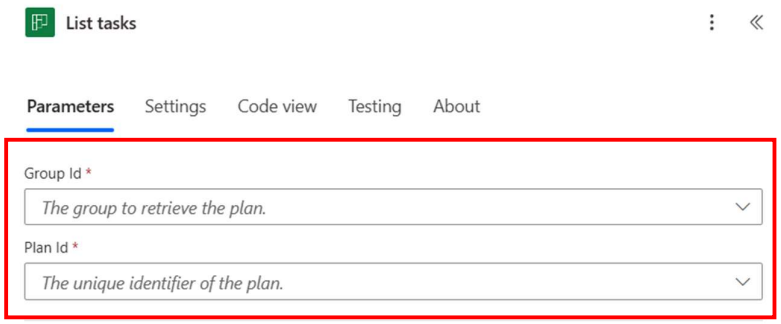
3. Name the flow and set a suitable **starting time** (e.g. 12:00 AM) and to repeat once **every day**. Then, click **Create**. This makes sure the data is refreshed daily.



4. Click on the **+** sign and search for the **List tasks** action, then select it.

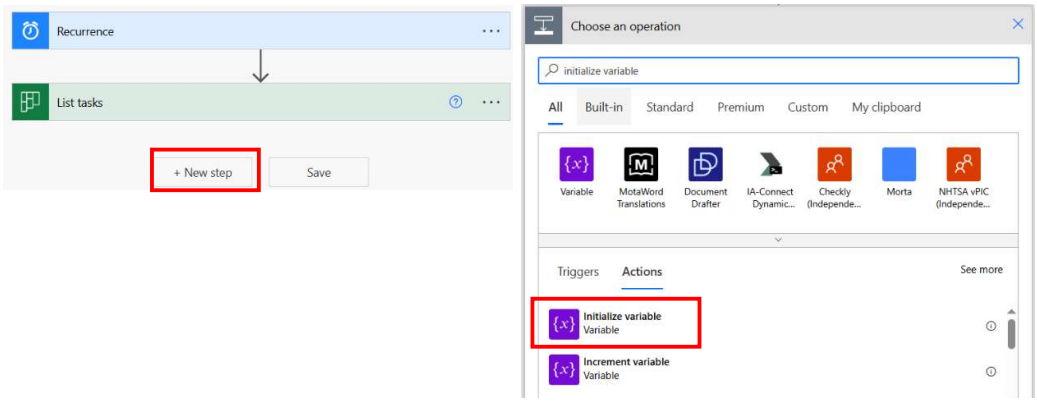


5. Select the relevant **group** and **planner**. This extracts all the data from Planner.



6. Toggle this **New designer** button on the top right of the page to switch to the classic designer view.

7. Click on **New step** and search for the **Initialize variable** action, then select it.



8. Name this variable **LabelMapping** and select **String** as its type, leave the value field empty. This variable will be used to contain data in the later steps.

9. Click on **New step** and search for the **Initialize variable** action again, then select it.

10. Name this variable **AppliedCategories** and select **String** as its type, leave the value field empty.

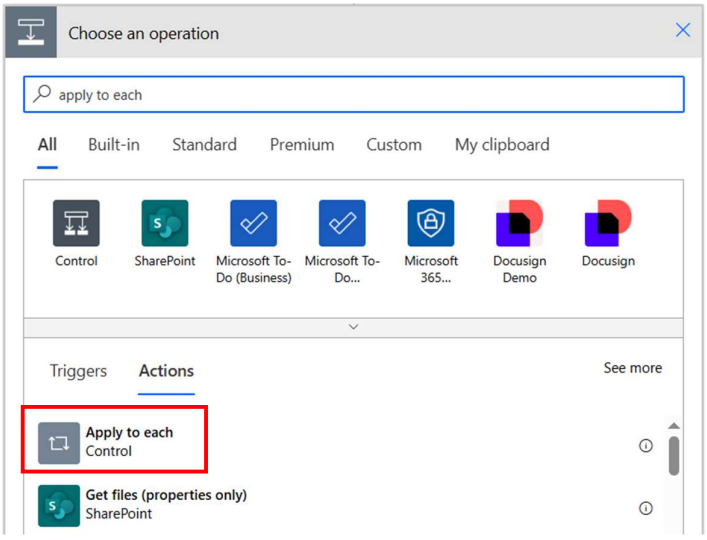
11. Click on **New step** and search for the **Initialize variable** action again, then select it.

12. Name this variable **AssignedUsers** and select **String** as its type, leave the value field empty.

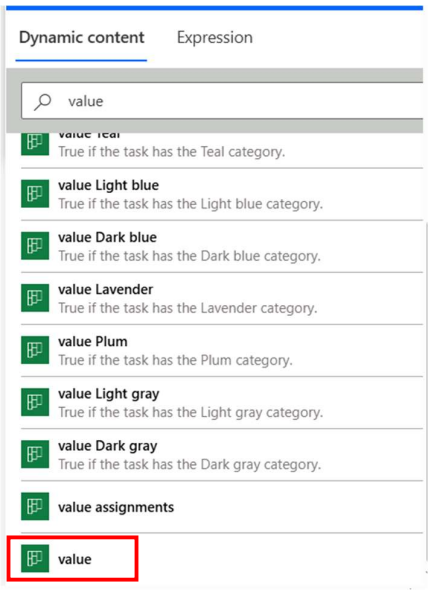
13. Click on **New step** and search for the **Initialize variable** action again, then select it.

14. Name this variable **TaskID** and select **String** as its type, leave the value field empty.

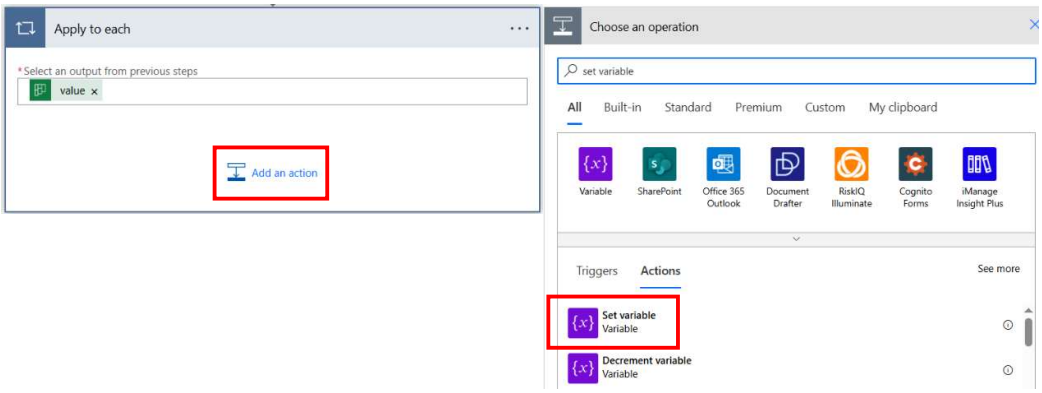
15. Click on **New step** and search for the **Apply to each** action, then select it.



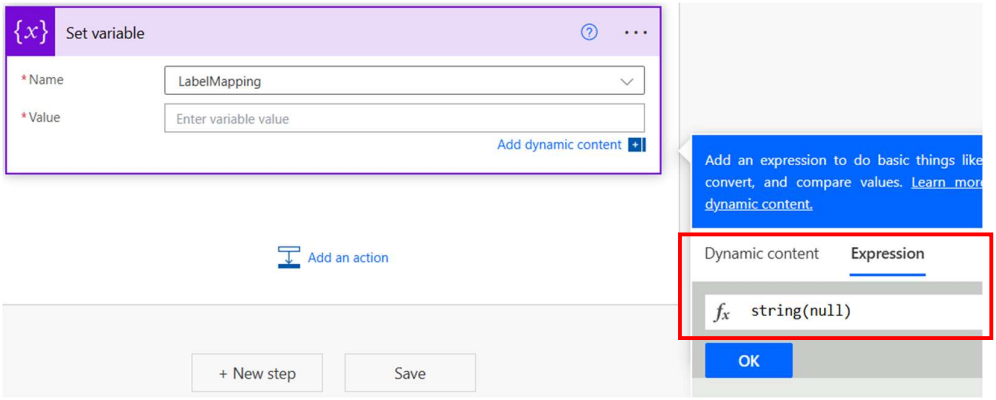
16. For the output field, select **value** (green) under **Dynamic content**. This essentially loops through all the tasks in Planner.



17. Click on **Add an action** and search for the **Set variable** action, then select it.



18. Select the **LabelMapping** variable and for the value field, type **string(null)** under **Expression**. This resets the variable after every loop so it's unique to each task.



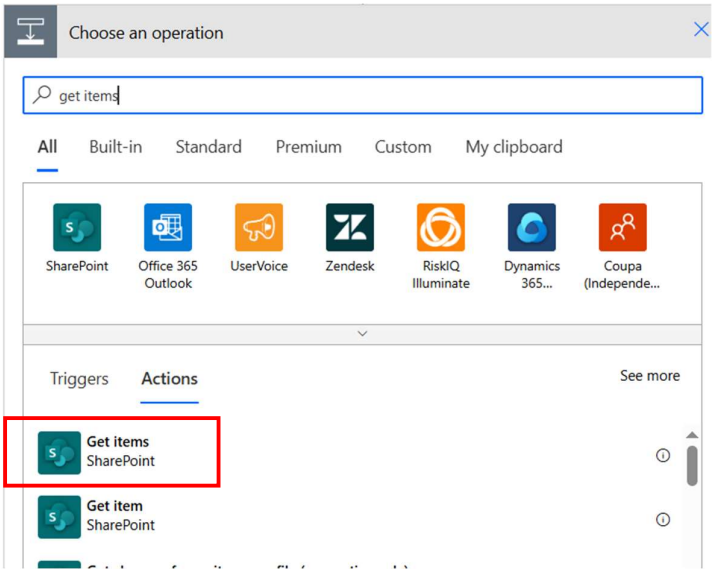
19. Click on **Add an action** and search for **Set variable** action again, then select it.

20. Select the **AppliedCategories** variable and for the value field, type **string(null)** under **Expression**.

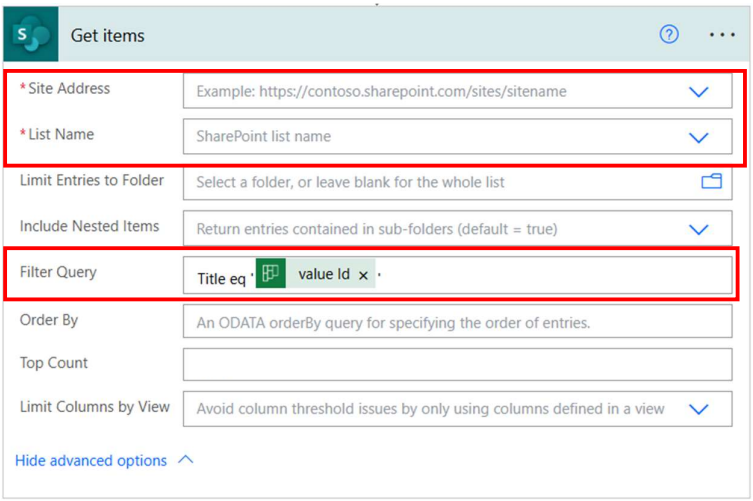
21. Click on **Add an action** and search for **Set variable** action again, then select it.

22. Select the **AssignedUsers** variable and for the value field, type **string(null)** under **Expression**.

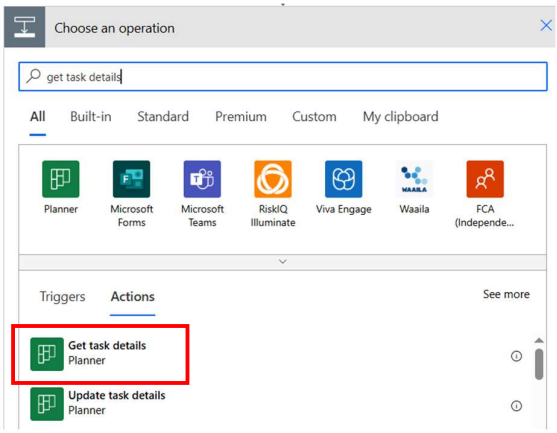
23. Click on **Add an action** and search for the **Get items** action, then select it.



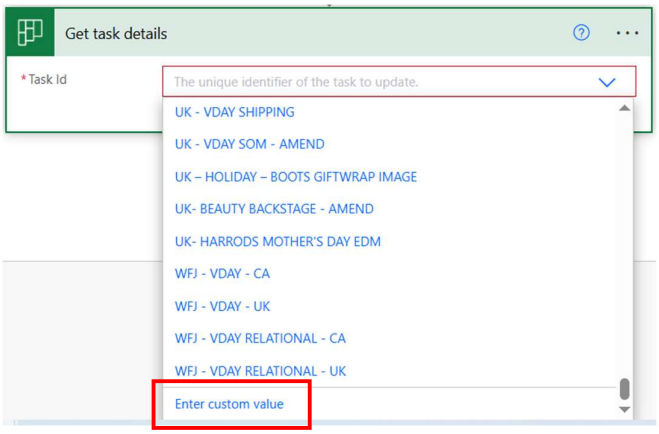
24. Select the relevant **site address** and **SharePoint List name**. For **Filter Query**, select **value Id** under **Dynamic content**, then add single quotation marks (**‘’**) around it and type **Title eq** before it. This filters the SharePoint list and only returns the task that has the same ID in Planner.



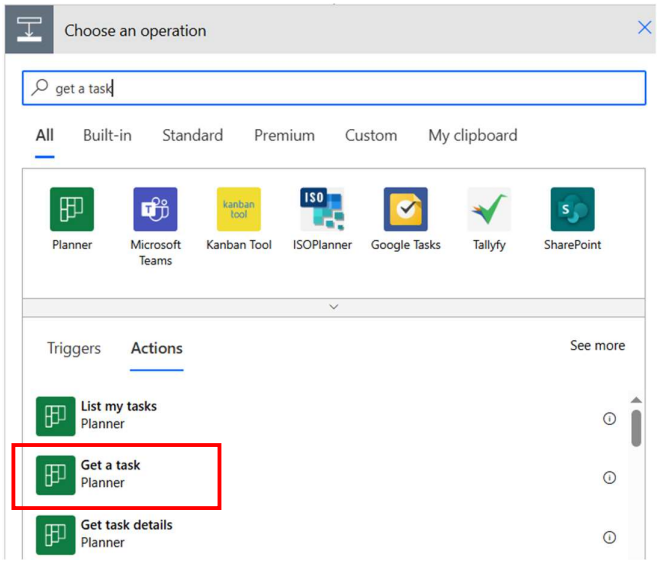
25. Click on **Add an action** and search for the **Get task details** action, then select it.



26. Click on the **Task Id** field and scroll through the list, then select the **Enter custom value** option. Select **value Id** under **Dynamic content**.



27. Click on **Add an action** and search for the **Get a task** action, then select it.

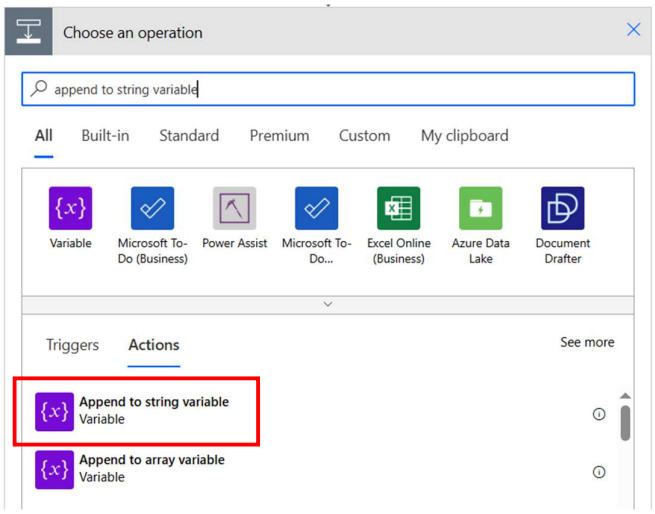


28. Click on the **Task Id** field and scroll through the list, then select the **Enter custom value** option. Select **value Id** under **Dynamic content**.

29. Click on **Add an action** and search for the **Set variable** action, then select it.

30. Select the **AppliedCategories** variable and for the value field, select **appliedCategories** under **Dynamic content**.

31. Click on **Add an action** and search for the **Append to string variable** action, then select it.

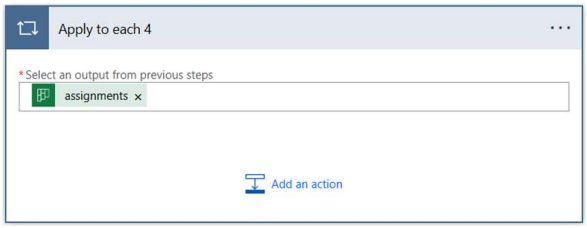


32. Select the **LabelMapping** variable and for the value field, type this formula under **Expression**. This formula is used to map each label in Planner. It should be modified according to the order of labels in your respective Planner. For example, in our Planner, the first label is E-Retail(REGION), so it is mapped to category1.

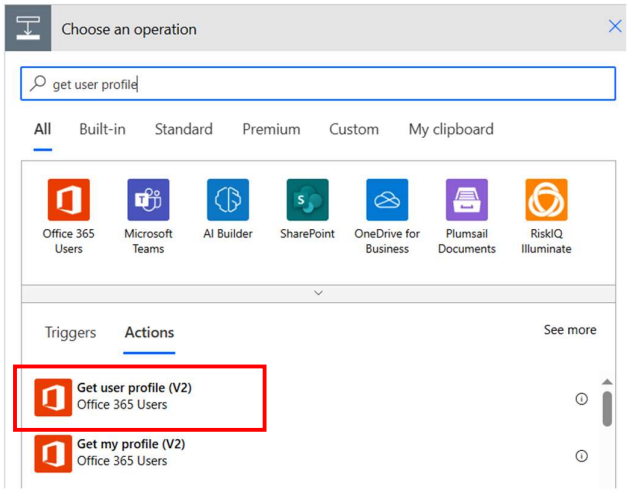
```
concat(
  if(contains(variables('AppliedCategories'), '"category1":true'), 'E-Retail(REGION);', ''),
  if(contains(variables('AppliedCategories'), '"category2":true'), 'E-Retail(UK);', ''),
  if(contains(variables('AppliedCategories'), '"category3":true'), 'Missing Info;', ''),
  if(contains(variables('AppliedCategories'), '"category6":true'), 'UK;', ''),
  if(contains(variables('AppliedCategories'), '"category7":true'), 'SA;', ''),
  if(contains(variables('AppliedCategories'), '"category8":true'), 'CA;', ''),
  if(contains(variables('AppliedCategories'), '"category9":true'), 'CRM;', ''),
  if(contains(variables('AppliedCategories'), '"category10":true'), 'IRE;', ''),
  if(contains(variables('AppliedCategories'), '"category11":true'), 'PR;', ''),
  if(contains(variables('AppliedCategories'), '"category12":true'), 'MEDIA;', ''),
  if(contains(variables('AppliedCategories'), '"category14":true'), 'ECOM;', ''),
  if(contains(variables('AppliedCategories'), '"category15":true'), 'SOCIAL TRAFFICKING;', ''),
  if(contains(variables('AppliedCategories'), '"category18":true'), 'RETAIL;', ''),
  if(contains(variables('AppliedCategories'), '"category20":true'), 'WATCHES & FINE
    JEWELLERY;', ''),
  if(contains(variables('AppliedCategories'), '"category22":true'), 'AMEND;', ''),
  if(contains(variables('AppliedCategories'), '"category24":true'), 'ADHOC;', ''),
  if(contains(variables('AppliedCategories'), '"category25":true'), 'TRAVEL RETAIL;', '')
)
```

33. Click on **Add an action** and search for the **Apply to each** action, then select it.

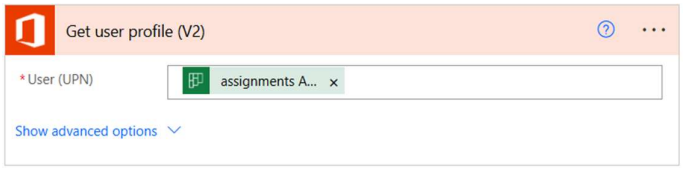
34. For the output field, select **assignments** under **Dynamic content**.



35. Click on the innermost **Add an action** and search for the **Get user profile (V2)** action, then select it.



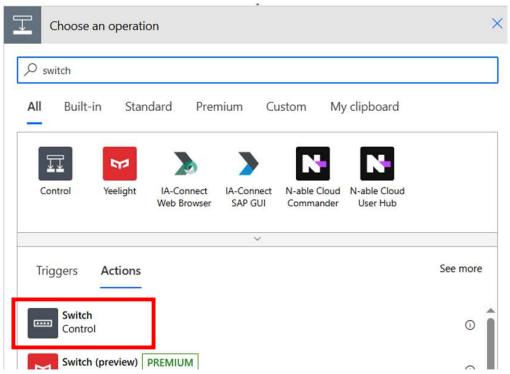
36. Select **assignments Assigned To User Id** under **Dynamic content**.



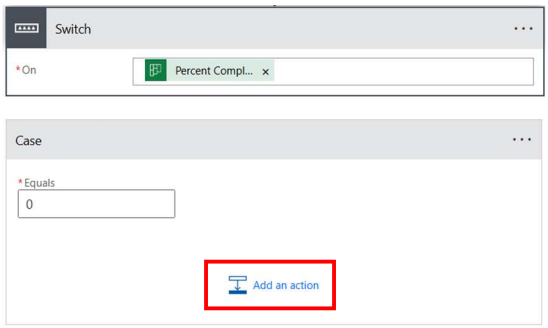
37. Click on the innermost **Add an action** and search for the **Append to string variable** action, then select it.

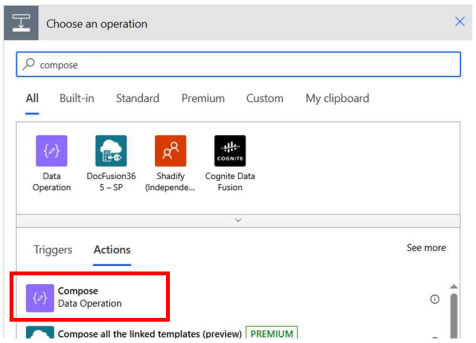
38. Select the **AssignedUsers** variable and for the value field, select **Display Name** under **Dynamic content**. This will list down all the individuals assigned to a specific task.

39. Click on **Add an action** and search for the **Switch** action, then select it.



40. For the **On** field, select **Percent Complete** under **Dynamic content**. For the first case, type **0** in the **Equals** field. Click on **Add an action** within the case and search for the **Compose** action, then select it.





41. For the **Inputs** field, type **Not started**. This means that if the task has a 0% completion rate, it will be categorized as a task that has not been started.

42. Click on the **+** sign to add another case. For the second case, type **50** in the **Equals** field.

43. Click on **Add an action** within the case and search for the **Compose** action again, then select it.

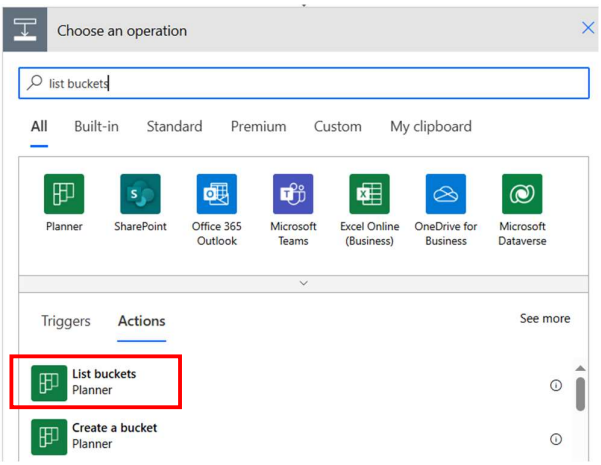
44. For the **Inputs** field, type **In Progress**.

45. Click on the **+** sign to add another case. For the third case, type **100** in the **Equals** field.

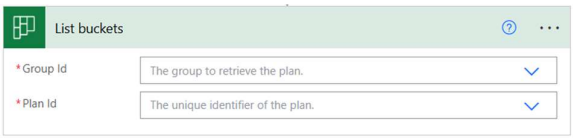
46. Click on **Add an action** within the case and search for the **Compose** action again, then select it.

47. For the **Inputs** field, type **Completed**.

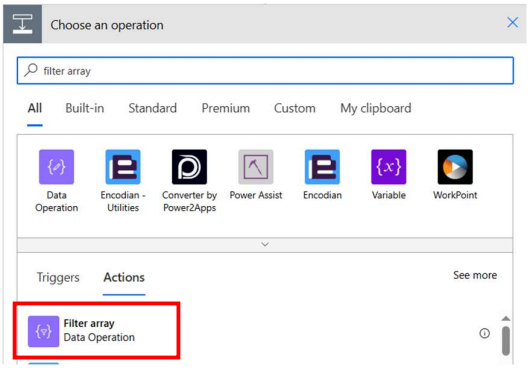
48. Click on **Add an action** at the bottom of the page and search for the **List buckets** action, then select it.



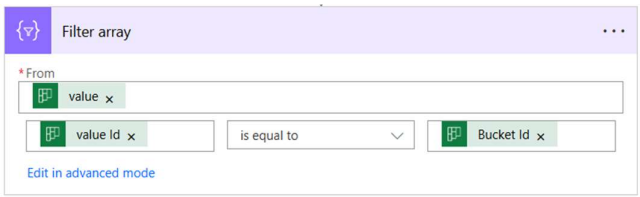
49. Select the relevant **group** and **planner**.



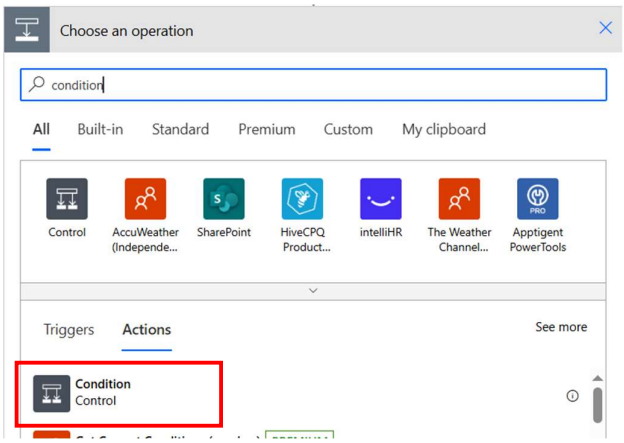
50. Click on **Add an action** and search for the **Filter array** action, then select it.



51. For the **From** field, select **value** (green) under **Dynamic content**. Then, select **value Id** under **Dynamic content**, select **is equal to** and select **Bucket Id** under **Dynamic content**. This retrieves the names of the buckets, instead of just the ID.

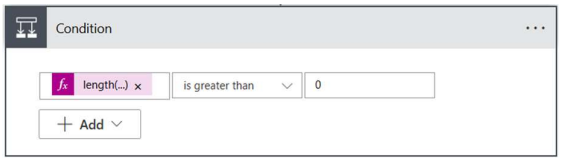


52. Click on **Add an action** and search for the **Condition** action, then select it.



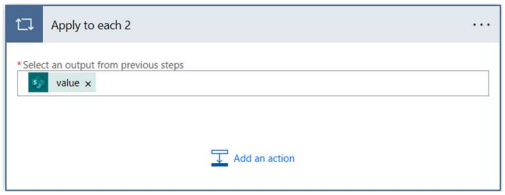
53. For the first field, type this formula under **Expression**. Next, select **is greater than** and type **0** in the next field. This checks if the task in Planner exists in the SharePoint list. If it already exists, then it updates the values according to Planner. If not, it creates a new row in the SharePoint list.

```
length(body('Get_items')?['value'])
```

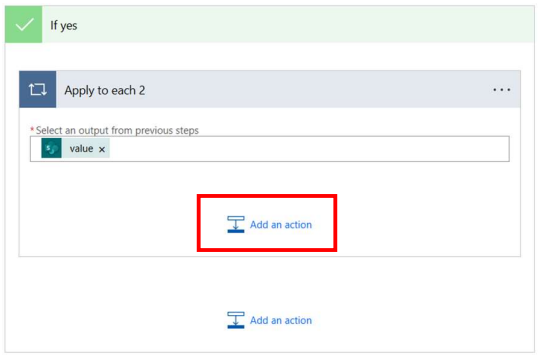


54. In the **If yes** section, click on **Add an action** and search for the **Apply to each** action, then select it.

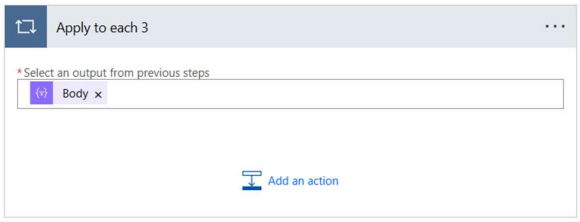
55. For the **output** field, select **value** (blue) under **Dynamic content**.



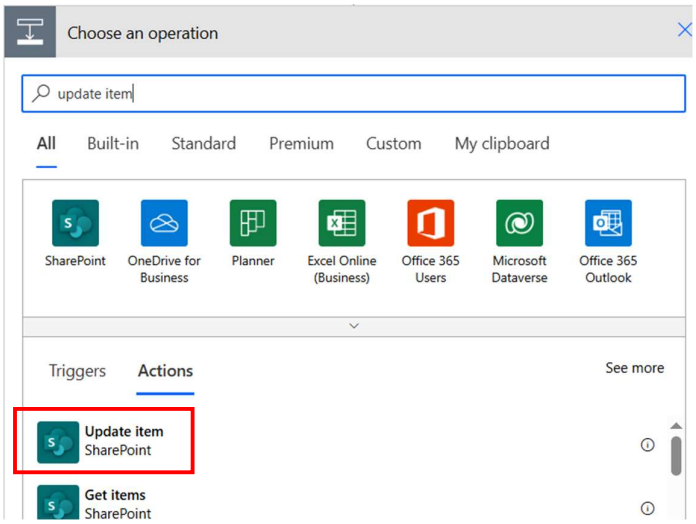
56. Click on the innermost **Add an action** and search for the **Apply to each** action again, then select it.



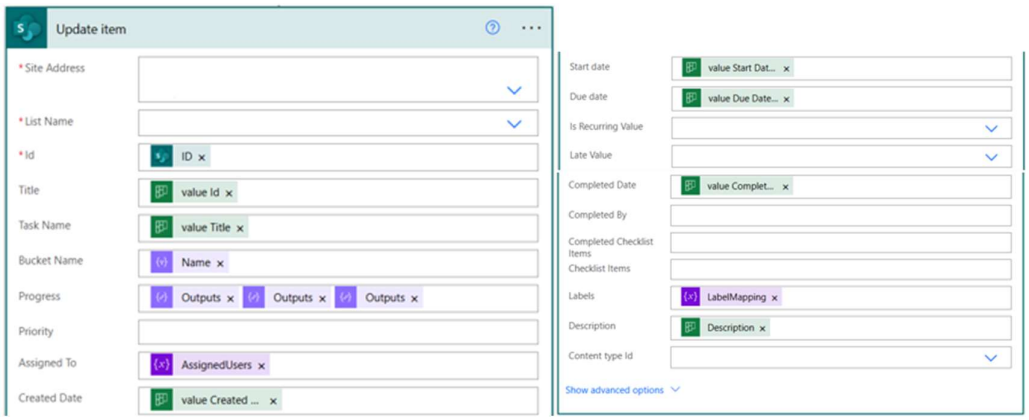
57. For the **output** field, select **body** (purple) under **Dynamic content**.



58. Click on the innermost **Add an action** and search for the **Update item** action, then select it.



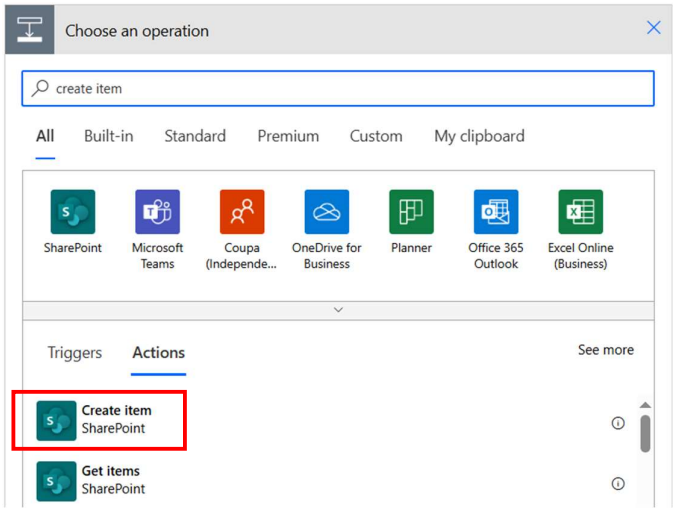
59. Select the relevant **site address** and **SharePoint list name**. Fill up the rest of the fields accordingly using **Dynamic content**. For the progress field, use an **Output** from each **Compose** action. This updates the task in the SharePoint list.



60. Now, go to the **If no** section, click on **Add an action** and search for the **Apply to each** action, then select it.

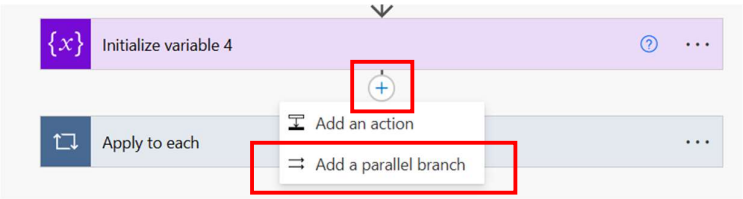
61. For the **output** field, select **body** (purple) under **Dynamic content**.

62. Click on the innermost **Add an action** and search for the **Create item** action again, then select it.



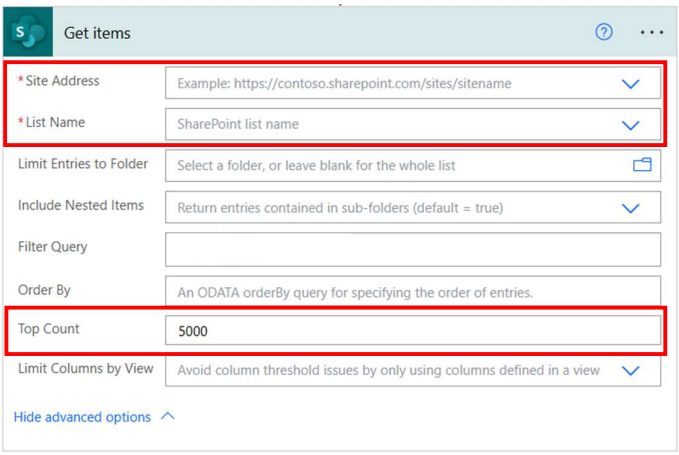
63. Fill up the fields exactly like the **Update item** action in **step 59**. This creates a new row in the SharePoint list.

64. Go back up to the **first Apply to each** action, click on the **+** sign and select **Add a parallel branch**.



65. Search for the **Get items** action and select it.

66. Select the relevant **site address** and **SharePoint List name**, then type 5000 in the **Top Count** field. This is the maximum number of tasks that can be retrieved from the SharePoint list.

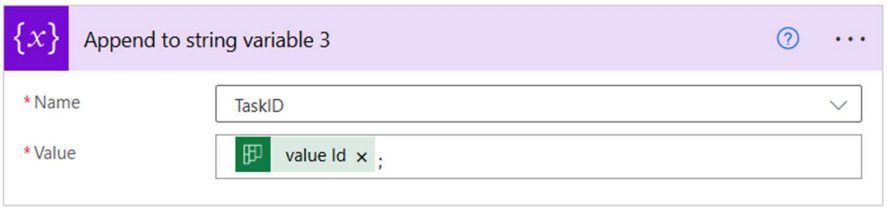


67. Click on the **+** sign below this **Get items** action, then search for the **Apply to each** action and select it.

68. For the output field, select **value** (green) under **Dynamic content**.

69. Click on the innermost **Add an action** and search for the **Append to string variable** action, then select it.

70. Select the **TaskID** variable and for the value field, select **value Id** under **Dynamic content** and add a semicolon (;) after it. This combines all Task IDs from Planner so we can check and update the SharePoint list according to the Planner.

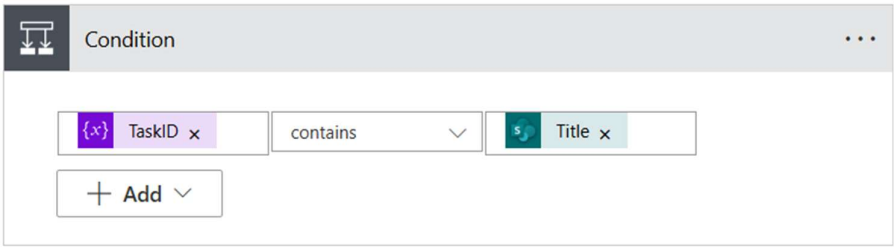


71. Click on the **+** sign below this **Apply to each** action, then search for the **Apply to each** action again and select it.

72. For the output field, select **value** (blue) under **Dynamic content**.

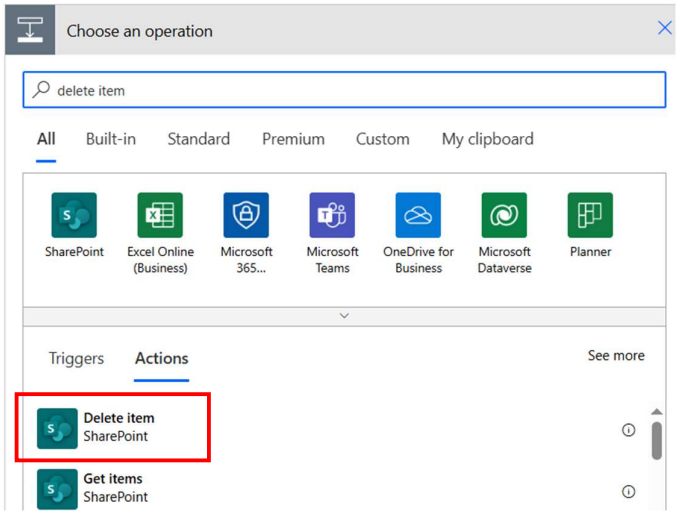
73. Click on the innermost **Add an action** and search for the **Condition** action, then select it.

74. For the first field, select **TaskID** under **Dynamic content**. Next, select **contain** and select **Title** (blue) under **Dynamic content** for the next field. This checks if a task in the SharePoint list is still in the Planner. If it's not, that task will be deleted from the SharePoint list.

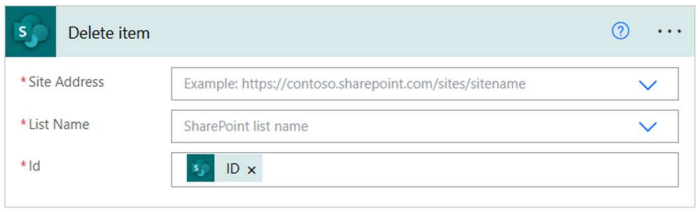


75. Leave the **If yes** section empty.

76. In the **If no** section, click on **Add an action** and search for the **Delete item** action, then select it.



77. Select the relevant **site address** and **SharePoint list name**. For the **Id** field, select **ID** (blue) under **Dynamic content**.

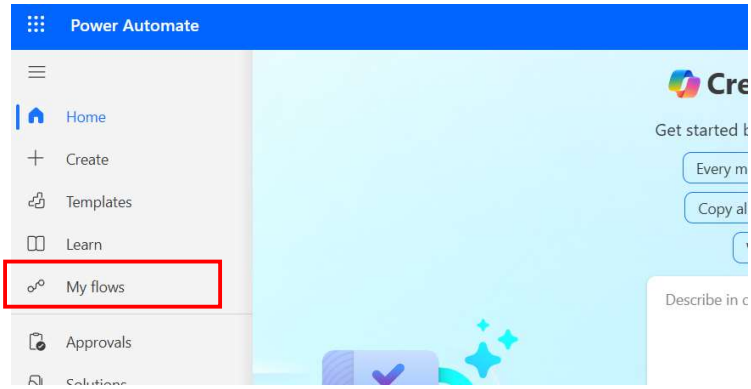


These are all the steps needed to build a Power Automate flow to automatically export a team's Planner to a SharePoint list.

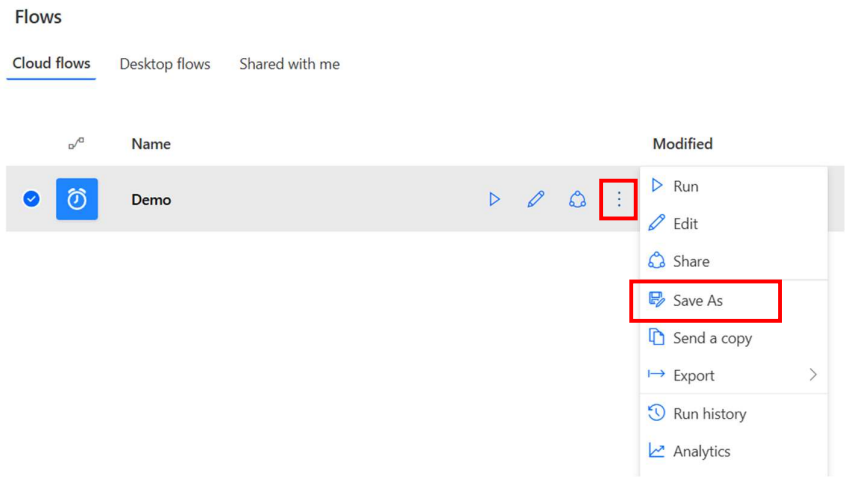
To replicate this flow for another team, follow the steps below.

1. Set up a new SharePoint list by **repeating steps 1 – 7** in the first two pages.

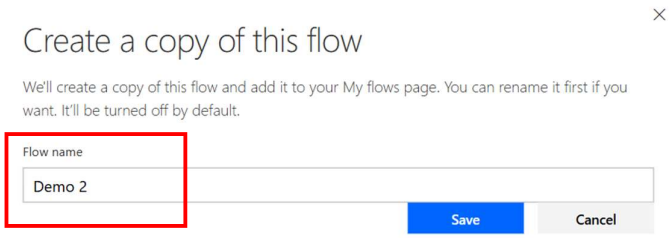
2. Open Power Automate from the Microsoft 365 portal. Then, click **My flows**.



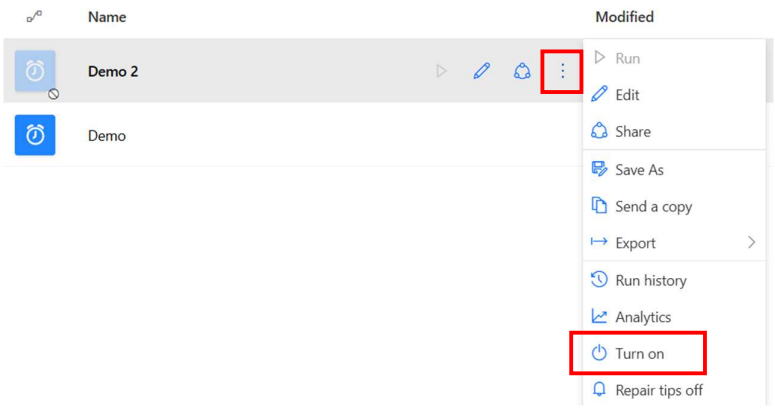
3. Click on the **three dots icon**, then select **Save As**.



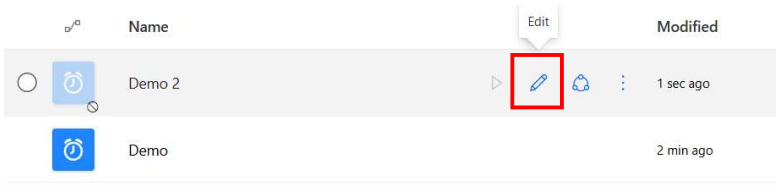
4. Give this new flow a suitable name, then click on **Save**.



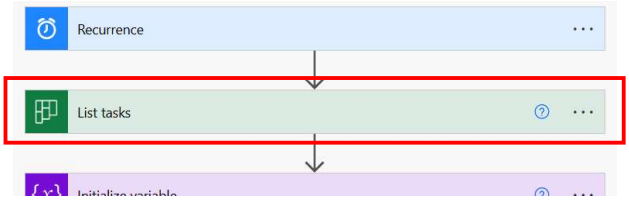
5. Click on the **three dots icon**, then select **Turn on** to activate this new flow.



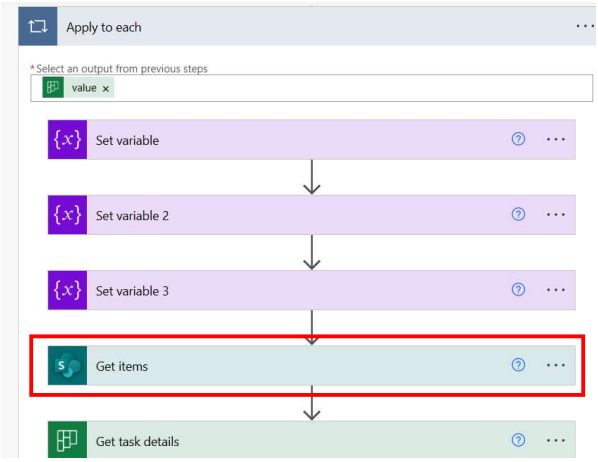
6. Click on the **pencil icon** to edit this new flow.



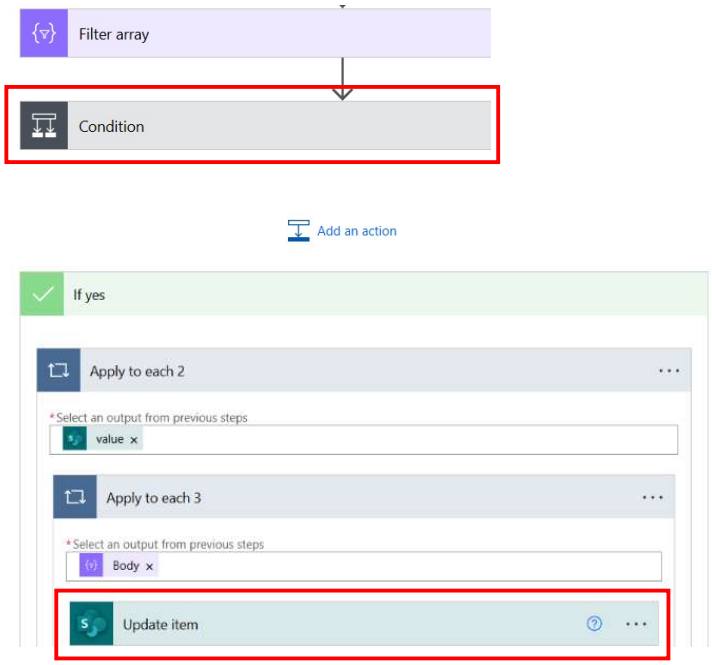
7. Select the **List tasks** action, then change the **group** and **planner** so it extracts data from this team's Planner.



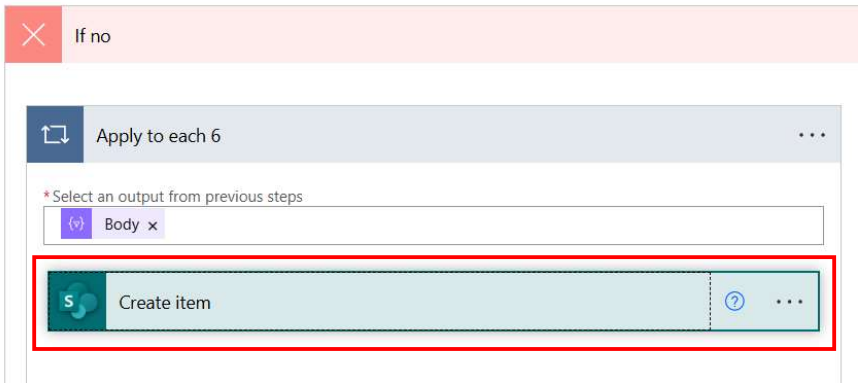
8. Scroll down and select the **Get items** action, then change the **Site Address** and **List Name** so it filters the team's SharePoint list. Leave the other fields the same.



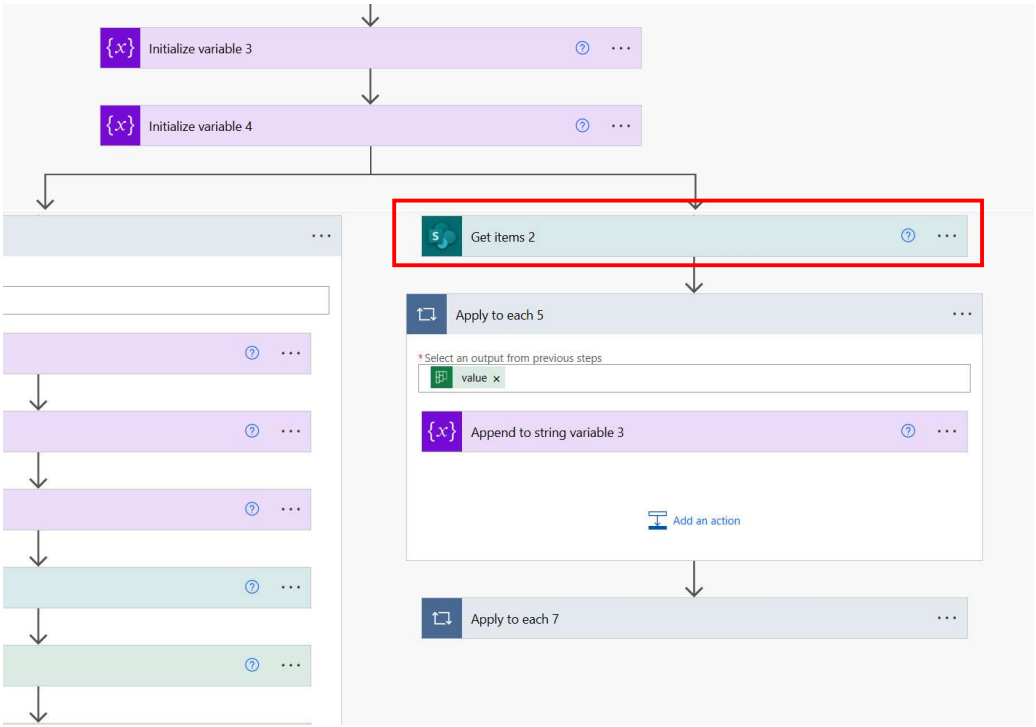
9. Scroll down and select the **Condition** action. Go to the **If yes** section and select the **Update item** action, then change the **Site Address** and **List Name**. For all the other fields, fill them up exactly like the **Update item** action in **step 59**.



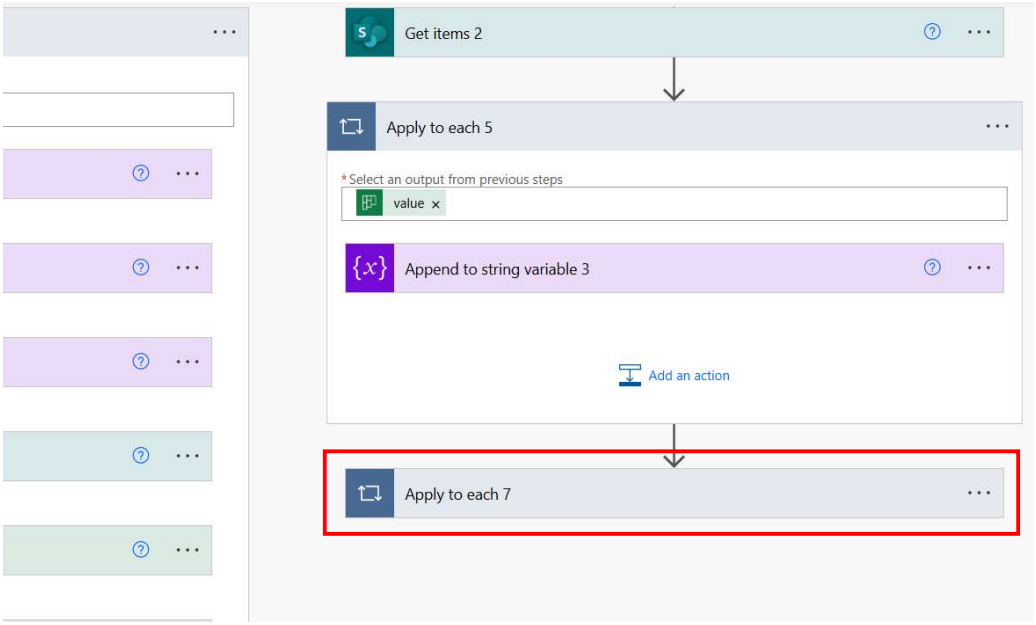
10. Go to the **If no** section and select the **Create item** action, then change the **Site Address** and **List Name**. For all the other fields, fill them up exactly like the previous step.

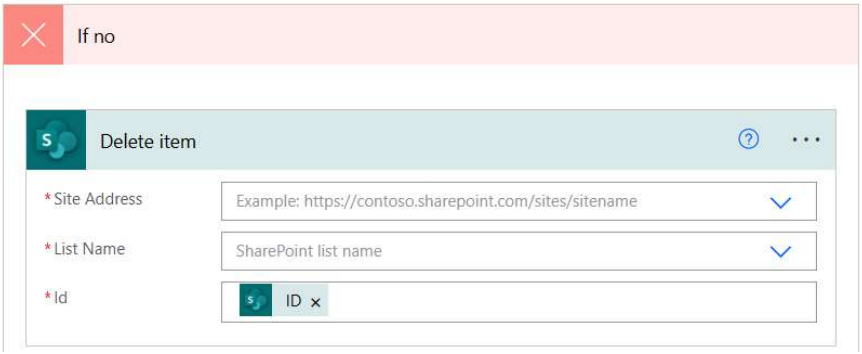


11. Scroll back up and select the **Get items 2** action in the **other branch**, then change the **Site Address** and **List Name**. Leave the other fields unchanged.



12. Click on the **Apply to each 7** action, then click on the **Condition** action and go to the **If no** section. Click on the **Delete item** action, then change the **Site Address** and **List Name**. Leave the **ID** unchanged.

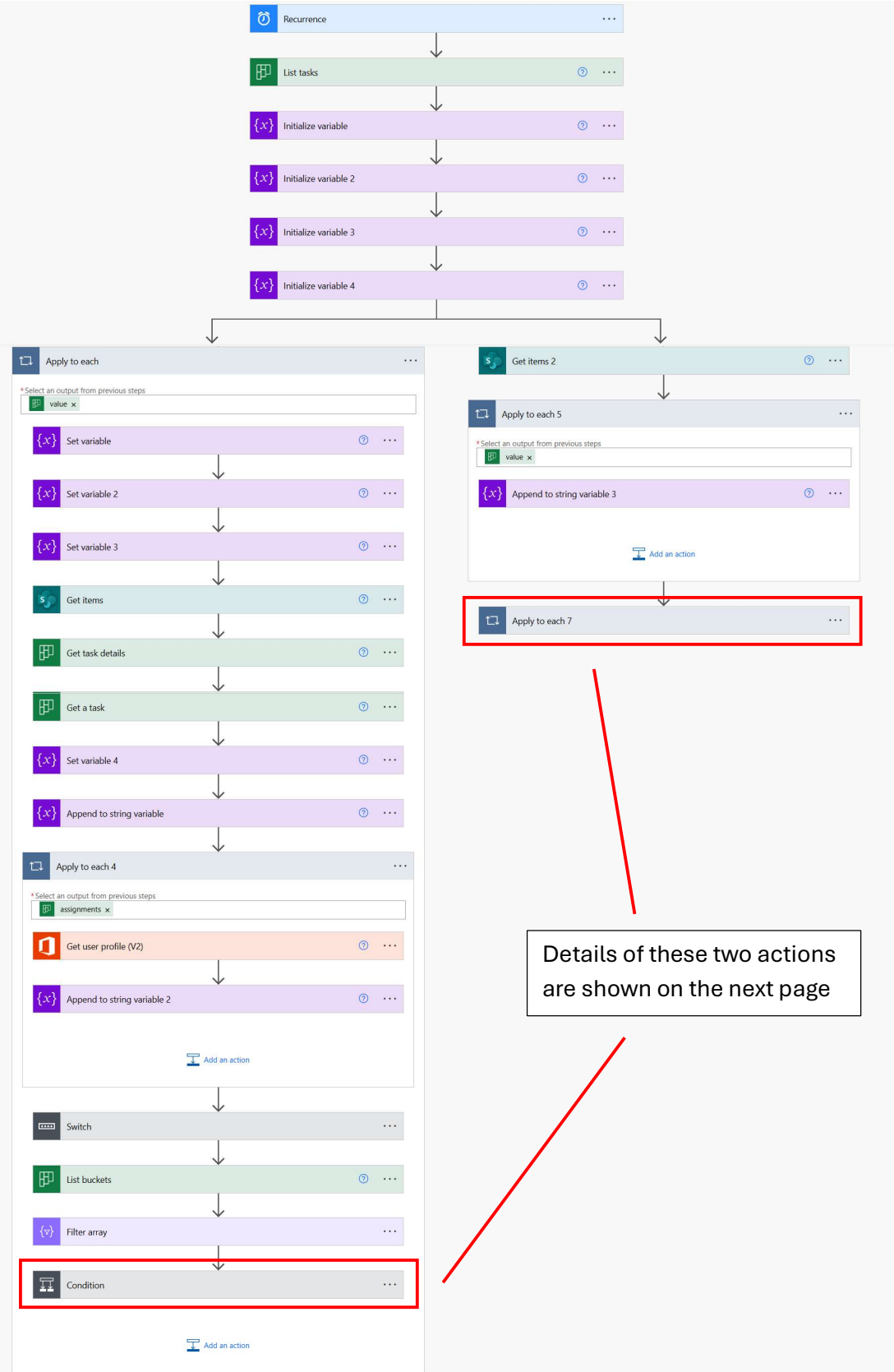




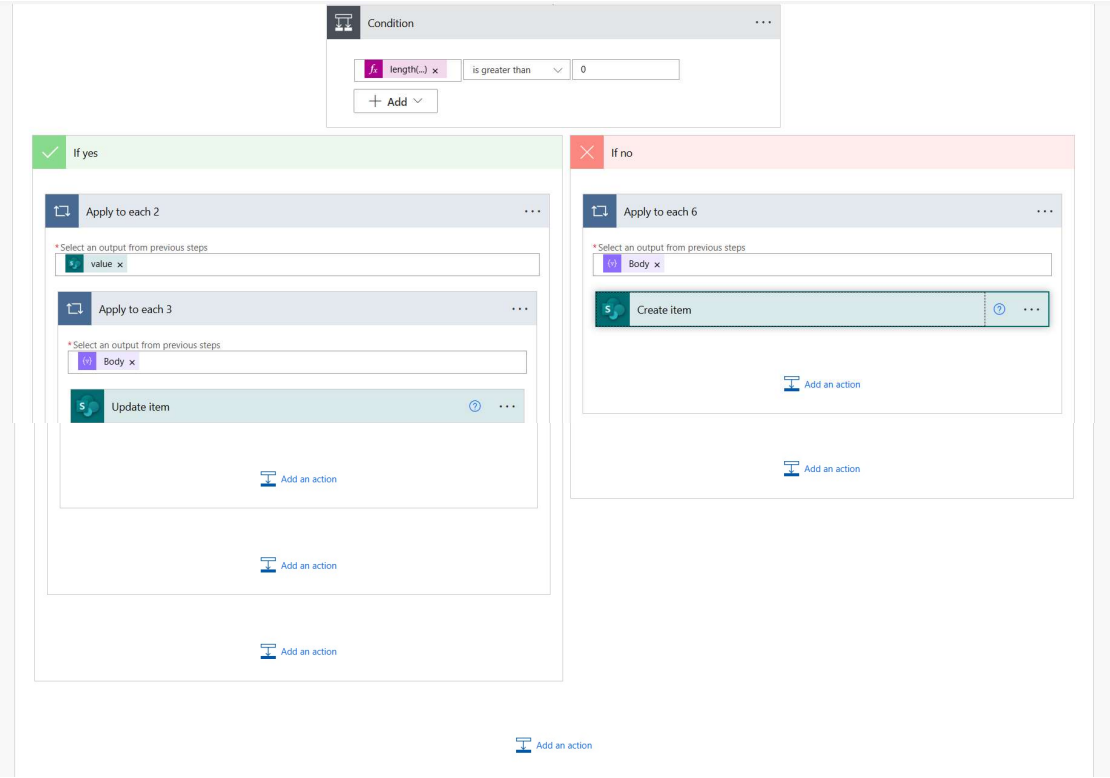
These are all the steps needed to replicate a Power Automate flow for another team.

Refer to the next page for an overview of how the entire flow looks.

Overview of the complete flow



Details of the Condition Action



Details of the Apply to each 7 Action