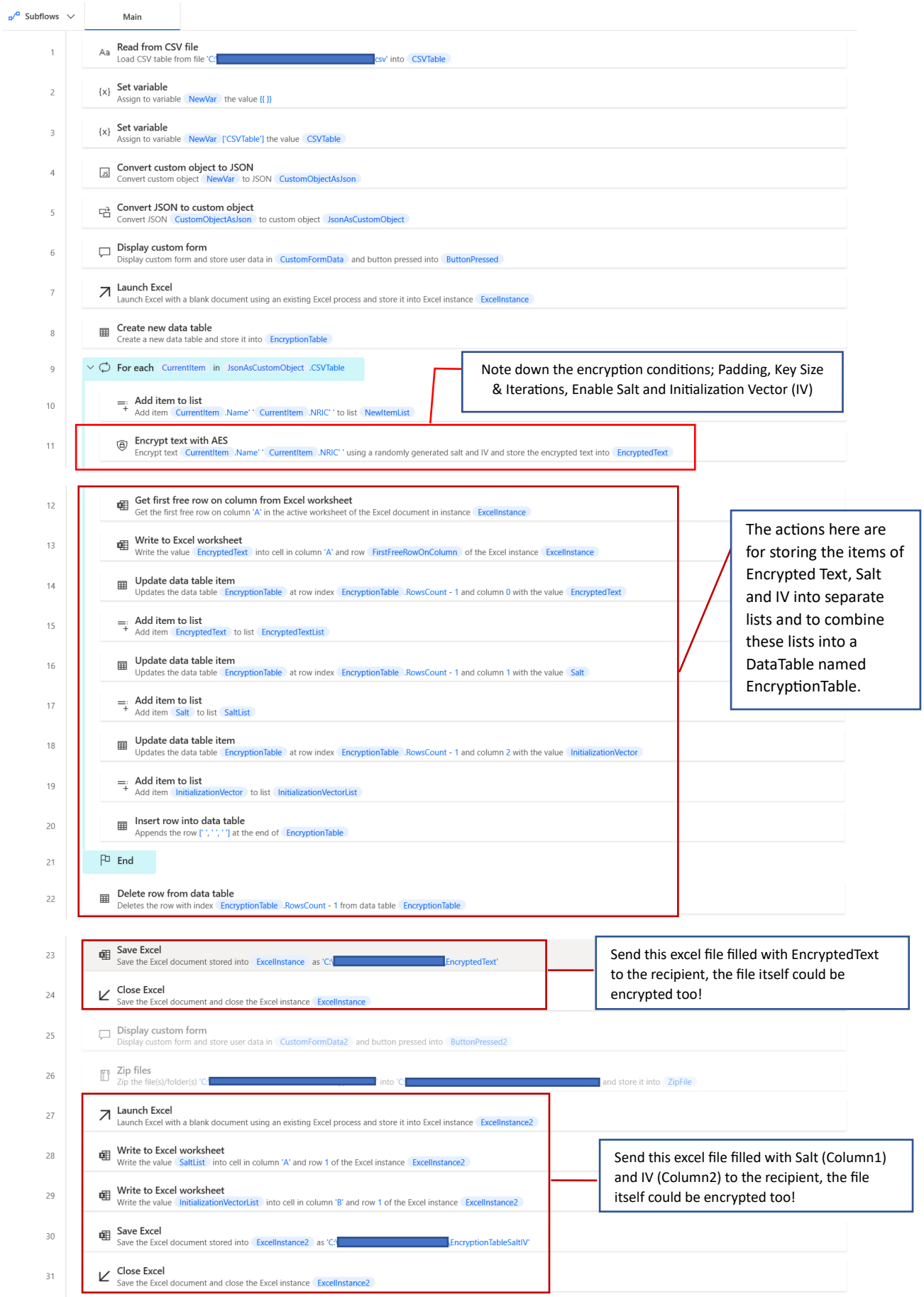
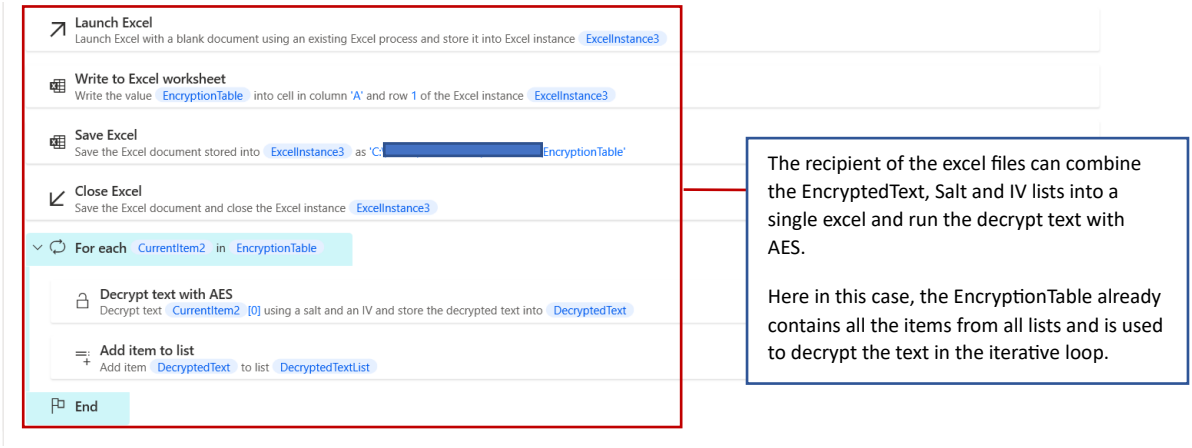

Subflows
Main
1 Read from CSV file
Load CSV table from file 'C:[redacted]csv' into CSVTable
2 Set variable
Assign to variable NewVar the value {[ ]}
3 Set variable
Assign to variable NewVar ['CSVTable'] the value CSVTable
4 Convert custom object to JSON
Convert custom object NewVar to JSON CustomObjectAsJson
5 Convert JSON to custom object
Convert JSON CustomObjectAsJson to custom object JsonAsCustomObject
6 Display custom form
Display custom form and store user data in CustomFormData and button pressed into ButtonPressed
7 Launch Excel
Launch Excel with a blank document using an existing Excel process and store it into Excel instance ExcelInstance
8 Create new data table
Create a new data table and store it into EncryptionTable
9 For each CurrentItem in JsonAsCustomObject .CSVTable
10 Add item to list
Add item CurrentItem .Name' ' CurrentItem .NRIC' ' to list NewItemList
11 Encrypt text with AES
Encrypt text CurrentItem .Name' ' CurrentItem .NRIC' ' using a randomly generated salt and IV and store the encrypted text into EncryptedText
Note down the encryption conditions; Padding, Key Size & Iterations, Enable Salt and Initialization Vector (IV)
12 Get first free row on column from Excel worksheet
Get the first free row on column 'A' in the active worksheet of the Excel document in instance ExcelInstance
13 Write to Excel worksheet
Write the value EncryptedText into cell in column 'A' and row FirstFreeRowOnColumn of the Excel instance ExcelInstance
14 Update data table item
Updates the data table EncryptionTable at row index EncryptionTable .RowsCount - 1 and column 0 with the value EncryptedText
15 Add item to list
Add item EncryptedText to list EncryptedTextList
16 Update data table item
Updates the data table EncryptionTable at row index EncryptionTable .RowsCount - 1 and column 1 with the value Salt
17 Add item to list
Add item Salt to list SaltList
18 Update data table item
Updates the data table EncryptionTable at row index EncryptionTable .RowsCount - 1 and column 2 with the value InitializationVector
19 Add item to list
Add item InitializationVector to list InitializationVectorList
20 Insert row into data table
Appends the row [' ', ' ', ' '] at the end of EncryptionTable
21 End
22 Delete row from data table
Deletes the row with index EncryptionTable .RowsCount - 1 from data table EncryptionTable
The actions here are for storing the items of Encrypted Text, Salt and IV into separate lists and to combine these lists into a DataTable named EncryptionTable.
23 Save Excel
Save the Excel document stored into ExcelInstance as 'C:\[redacted]EncryptedText'
24 Close Excel
Save the Excel document and close the Excel instance ExcelInstance
Send this excel file filled with EncryptedText to the recipient, the file itself could be encrypted too!
25 Display custom form
Display custom form and store user data in CustomFormData2 and button pressed into ButtonPressed2
26 Zip files
Zip the file(s)/folder(s) 'C:[redacted] into 'C:[redacted] and store it into ZipFile
27 Launch Excel
Launch Excel with a blank document using an existing Excel process and store it into Excel instance ExcelInstance2
28 Write to Excel worksheet
Write the value SaltList into cell in column 'A' and row 1 of the Excel instance ExcelInstance2
29 Write to Excel worksheet
Write the value InitializationVectorList into cell in column 'B' and row 1 of the Excel instance ExcelInstance2
30 Save Excel
Save the Excel document stored into ExcelInstance2 as 'C:\[redacted].EncryptionTableSaltIV'
31 Close Excel
Save the Excel document and close the Excel instance ExcelInstance2
Send this excel file filled with Salt (Column1) and IV (Column2) to the recipient, the file itself could be encrypted too!



The recipient of the excel files can combine the EncryptedText, Salt and IV lists into a single excel and run the decrypt text with AES.

Here in this case, the EncryptionTable already contains all the items from all lists and is used to decrypt the text in the iterative loop.

The encryption and decryption PAD RPA workflow illustrates that sensitive data could be encrypted down to each data row content.

The recipient needs to decode the files with the sender passing them this information:

1) The files that store the EncryptedText, Salt and IV
2) The password to unzip the files (assuming it is zip locked)
3) The identification of each list of data, whether it is EncryptedText, Salt or IV
4) The Padding, Key Size & Iterations conditions
5) Step 36-39 to decrypt the file in PAD
6) The AES Encryption Key Password.