PSEUDOCODE:

START

CLASS SimpleSystem

METHOD \_\_init\_\_(root)

SET root window title and size

INITIALIZE lists for usernames, user\_ids

INITIALIZE dictionary sources\_of\_income (source: salary)

INITIALIZE finance\_data dictionary with categories: Fundamentals, Fun, Future You

CREATE tab control with tabs: File, Finance, View, Report

CALL create\_file\_tab()

CALL create\_finance\_tab()

CALL create\_view\_tab()

CALL create\_report\_tab()

METHOD create\_file\_tab()

CREATE Username label and entry field

CREATE User ID label and entry field

CREATE Add User button -> calls add\_user()

CREATE Delete User button -> calls delete\_user()

CREATE Continue button -> calls show\_finance\_tab()

CREATE Listbox to display current users

METHOD add\_user()

GET username input

GET user\_id input

IF both username and user\_id are not empty THEN

ADD username to usernames list

ADD user\_id to user\_ids list

INSERT username and user\_id to user Listbox

CLEAR username and user\_id entry fields

SHOW success message

ELSE

SHOW warning message to enter both fields

METHOD delete\_user()

GET selected index from user Listbox

IF an item is selected THEN

DELETE selected item from Listbox

REMOVE corresponding username and user\_id from lists

SHOW success message

ELSE

SHOW warning message to select a user

METHOD create\_finance\_tab()

CREATE main frame for finance

CREATE buttons: Show Totals (calls show\_totals()), Continue (calls show\_view\_tab())

FOR each category (Fundamentals, Fun, Future You)

CREATE category frame with background color

CALL create\_category\_frame(frame, category)

METHOD create\_category\_frame(frame, category)

DISPLAY category name

CREATE Treeview with columns for Item and Amount

CREATE buttons: Add Item (calls add\_item()), Delete Item (calls delete\_item())

INITIALIZE data list for category

METHOD add\_item(category)

PROMPT user for item name

PROMPT user for amount

IF inputs are valid numbers THEN

ADD item and amount to category's data list

UPDATE corresponding Treeview

SHOW success message

ELSE

SHOW warning/error message

METHOD delete\_item(category)

GET selected item in category's Treeview

IF an item is selected THEN

REMOVE item from data list

UPDATE Treeview

SHOW success message

ELSE

SHOW warning message to select an item

METHOD update\_treeview(category)

CLEAR current Treeview entries

INSERT all items from category data list into Treeview

METHOD create\_view\_tab()

CREATE inputs for adding source of income and salary

CREATE buttons: Add source (calls add\_income\_source()), Delete source (calls delete\_income\_source())

CREATE Income sources Treeview

CREATE button to show finance summary (calls refresh\_summary\_table())

CREATE Finance summary Treeview

CREATE Continue button (calls show\_report\_tab())

METHOD add\_income\_source()

GET source and salary input

IF inputs are valid THEN

ADD source and salary to sources\_of\_income dictionary

UPDATE Income sources Treeview

SHOW success message

ELSE

SHOW warning message

METHOD delete\_income\_source()

GET selected source in Income sources Treeview

IF selected THEN

REMOVE source from dictionary

UPDATE Treeview

SHOW success message

ELSE

SHOW warning message

METHOD refresh\_income\_table()

CLEAR Income sources Treeview

INSERT all sources and salaries from dictionary into Treeview

METHOD refresh\_summary\_table()

CALCULATE totals for each category from finance\_data

CALCULATE total income from sources\_of\_income

UPDATE Finance summary Treeview with totals and remaining balance

METHOD create\_report\_tab()

CREATE search input for username/user\_id

CREATE buttons: Search user, Print report, Search again, Exit

CREATE scrollable text widget for report display

METHOD search\_user()

GET search term input

SEARCH in usernames and user\_ids

IF found THEN

DISPLAY user info and finance summary in report text

ELSE

SHOW user not found message

METHOD print\_report()

GET report text content

SAVE report to a text file and send to printer

SHOW success or error message accordingly

METHOD clear\_search()

CLEAR search input

CLEAR report display

METHOD show\_totals()

CALCULATE and DISPLAY totals for each finance category in a popup

METHOD show\_finance\_tab()

SWITCH to Finance tab

METHOD show\_view\_tab()

SWITCH to View tab

METHOD show\_report\_tab()

SWITCH to Report tab

END CLASS

MAIN

CREATE Tkinter root window

CREATE instance of SimpleSystem with root window

RUN main event loop

END