Laboratory Activity No. 10	
The Selection Widgets using Pycharm	
Course Code: CPE103	**Program:** BSCPE
Course Title: Object-Oriented Programming	**Date Performed:** 03/22/25
Section: 1-A	**Date Submitted:** 03/22/25
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1. Objective(s):

This activity aims to familiarize students with the Pycharm framework and selection widget

2. Intended Learning Outcomes (ILOs):

The students should be able to:
2.1 To create a Python program that use selection widget like Combobox
2.2 To use ttk function as part of Tk ( ) in the Tkinter module

3. Discussion:

A Graphical User Interface (GUI) application is a program that the user can interact with through graphics (windows, buttons, text fields, checkboxes, images, icons, etc..) such as the Desktop GUI of Windows OS by using a mouse and keyboard unlike with a Command-line program or Terminal program that support keyboard inputs only.

Pycharm is an integrated development environment used for programming in Python. It provides code analysis, a graphical debugger, an integrated unit tester, integration with version control systems, and supports web development with Django.

4. Materials and Equipment:

Desktop Computer with Anaconda Python or Pycharm
Windows Operating System

5. Procedure:

```python
# Creating tkinter window and set dimensions
window = tk.Tk()
window.title('Combobox')
window.geometry('500x250')


def choice(event):
    month = event.widget.get()
    print("Your birth month", month)


# label text for title
ttk.Label(window, text="Choose your birth month",
          background='light yellow', foreground="black",
          font=("Times New Roman", 15)).grid(row=0, column=1)
```
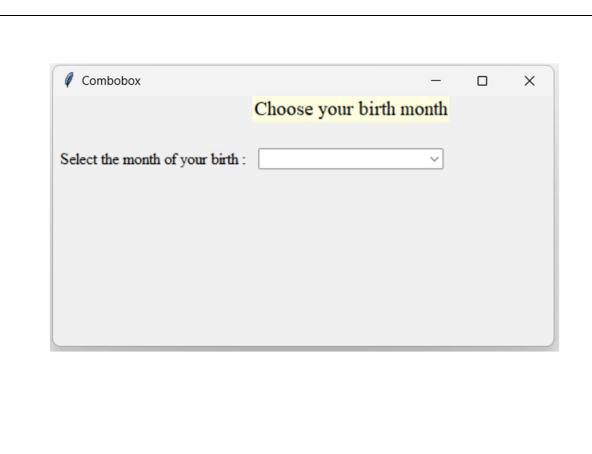
1.

2. Run the program and observe the output.

Adding an icon
3. Download any .ico picture from https://icon-icons.com/ or any similar sites.
4. Place the icon in your folder (ex. Oopfa1<lastname>_lab10)

```
# Set label
ttk.Label(windo month.grid(column=1, row=5)
        font= month.current()

        def choice(event):
# Create Combob    showinfo(
n = tk.StringVa            title = "Selection",
month = ttk.Com            message = f'You selected{n.get()}')

# Adding combob month.bind("<<ComboboxSelected>>", choice)
month['values'] window.mainloop()

            ' March',
            ' April',
            ' May',
            ' June',
            ' July',
            ' August',
            'September',
            'October',
            'November',
            'December')
```

5. Run the program again, the program should now have an icon similar to the program below.

Combobox   —   □   ✕

Choose your birth month

Select the month of your birth :   [⌄]

6. Supplementary Activity:

Task
   1. Create label widgets below to label your birth date <dd>, birth year <yyyy>
   2. Create combobox to drop down your birth date <dd>, birth year <yyyy>
   3. Create another method to show info about your birth date <dd>, birth year <yyyy>

Note: You may also use additional selection(listbox, radio button, check button) or common widgets to improve the design of your GUI.

Questions
   1. What are selection widgets?

Selection widgets are UI elements that allow users to choose from predefined options, like ComboBoxes, Listboxes, Radio Buttons, and Check Buttons. They make selecting input faster and more accurate.

   2. Which Python libraries provide selection widgets?

Python libraries like **Tkinter**, **PyQt**, **wxPython**, and **Kivy** provide selection widgets such as ComboBoxes, Listboxes, and Radio Buttons for building GUIs.

   3. How do selection widgets enhance user interaction in GUI applications

Selection widgets simplify user input by offering clear, organized choices, reducing errors, saving space, and speeding up the process. They improve efficiency and the overall user experience.

7. Conclusion:

8. Assessment Rubric: