```
1 #!/usr/bin/env python3
 2
 3 import tkinter as tk
 4 from tkinter import ttk
 5
 6
 7 class AddressBookApp(tk.Frame):
       def __init__(self, master=None):
 8
           super().__init__(master)
 9
           self.master.title('Address Book')
10
11
           self.pack()
12
           self._create_widgets()
13
14
       def _create_widgets(self):
           tree_view_entries = ["Entry 1", "Entry 2",
15
                                 "Entry 3", "Entry 4"]
16
17
           treeview_widget = ttk.Treeview(self.master)
           index = 1
18
19
           for entry in tree_view_entries:
               treeview_widget.insert('', 'end', index
20
   , text=entry)
21
               index += 1
22
           treeview_widget.pack()
23
           self._create_menus()
24
25
       def _create_menus(self):
           menu_widget = tk.Menu(self.master)
26
           file_menu = tk.Menu(menu_widget)
27
           contact_menu = tk.Menu(menu_widget)
28
           file_menu.add_command(label="New", command=
29
   self._new_addressbook)
           file_menu.add_command(label="Open...",
30
   command=self._open_addressbook)
31
           file_menu.add_separator()
32
           file_menu.add_command(label="Exit", command
   =root.quit)
33
           contact_menu.add_command(label="Add Contact
   ", command=self._add_contact)
34
           contact_menu.add_command(label="Remove")
35
   Contact", command=self._remove_contact)
```

```
File - /Users/piyasingh/PycharmProjects/pythonProject7/4rthproject.py
            menu_widget.add_cascade(label="File", menu=
36
   file_menu)
            menu_widget.add_cascade(label="Contact",
37
   menu=contact_menu)
38
39
             self.master.config(menu=menu_widget)
40
41
        def _new_addressbook(self):
42
            pass
43
        def _open_addressbook(self):
44
45
             pass
46
47
        def _add_contact(self):
48
             pass
49
50
        def _remove_contact(self):
51
             pass
52
53
54 # Main entry point
55 root = tk.Tk()
56 app = AddressBookApp(master=root)
57 app.mainloop()
58
59
```