

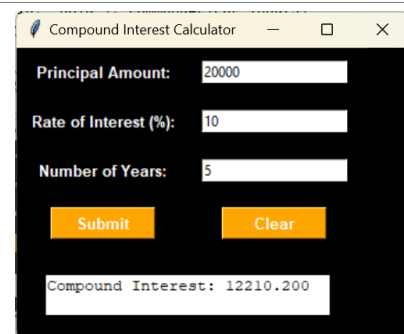
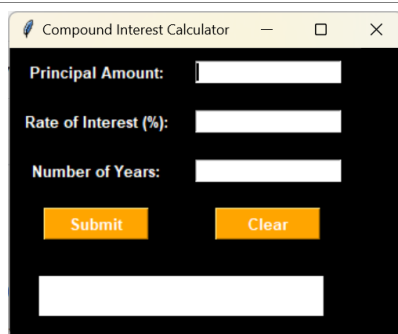
Exercise 5

Create a GUI to input principal amount, rate of interest, and number of years. Calculate compound interest. When button submit is pressed compound interest should be displayed in a textbox. When clear button is pressed all contents should be cleared.

Code

```
import tkinter as tk
def compound_interest():
    principal = float(principal_entry.get())
    rate = float(rate_entry.get()) / 100
    years = float(years_entry.get())
    compound_interest = principal * (1 + rate)**years - principal
    result_textbox.delete("1.0", tk.END) # Clear previous content
    result_textbox.insert(tk.END, f"Compound Interest: {compound_interest:.3f}")
def clear_inputs():
    principal_entry.delete(0, tk.END)
    rate_entry.delete(0, tk.END)
    years_entry.delete(0, tk.END)
    result_textbox.delete("1.0", tk.END) # Clear previous content
window = tk.Tk()
window.title("Compound Interest Calculator")
window.configure(bg="black")
principal_label = tk.Label(window, text="Principal Amount:", foreground="white",
background="black", font=("Arial", 10, "bold"))
principal_label.grid(column=0, row=0, padx=10, pady=10)
principal_entry = tk.Entry(window)
principal_entry.grid(column=1, row=0, padx=10, pady=10)
principal_entry.focus()
rate_label = tk.Label(window, text="Rate of Interest (%):", foreground="white",
background="black", font=("Arial", 10, "bold"))
rate_label.grid(column=0, row=1, padx=10, pady=10)
rate_entry = tk.Entry(window)
rate_entry.grid(column=1, row=1, padx=10, pady=10)
years_label = tk.Label(window, text="Number of Years:", foreground="white",
background="black", font=("Arial", 10, "bold"))
years_label.grid(column=0, row=2, padx=10, pady=10)
years_entry = tk.Entry(window)
years_entry.grid(column=1, row=2, padx=10, pady=10)
submit_button = tk.Button(window, width=10, text="Submit", bg="orange", fg="white",
font=("Arial", 10, "bold"), command=compound_interest)
submit_button.grid(column=0, row=3, padx=10, pady=10)
clear_button = tk.Button(window, width=10, text="Clear", bg="orange", fg="white",
font=("Arial", 10, "bold"), command=clear_inputs)
clear_button.grid(column=1, row=3, padx=10, pady=10)
result_textbox = tk.Text(window, height=1.5, width=30, bd=10, relief="solid")
result_textbox.grid(column=0, row=4, colspan=2, padx=10, pady=10)
window.mainloop()
```

Output



Date of Submission	Signature of the Faculty
Remarks	