```
class ComplexNumber:
    def __init__(self, real, imaginary):
        self.real = real
        self.imaginary = imaginary

    def __add__(self, other):
        real_sum = self.real + other.real
        imaginary_sum = self.imaginary + other.imaginary
        return ComplexNumber(real_sum, imaginary_sum)

    def __str__(self):
        if self.imaginary < 0:
            return f"{self.real} - {abs(self.imaginary)}i"
        return f"{self.real} + {self.imaginary}i"

# Test the ComplexNumber class
c1 = ComplexNumber(3, 4)
c2 = ComplexNumber(2, -5)

sum_complex = c1 + c2

print("Complex Number 1:", c1)
print("Complex Number 2:", c2)
print("Sum of Complex Numbers:", sum_complex)



import tkinter as tk
from tkinter import messagebox
import string
import random

class PasswordGeneratorApp:
    def __init__(self, root):
        self.root = root
        self.root.title("Random Password Generator")

        self.password_label = tk.Label(root, text="Generated Password:")
        self.password_display = tk.Label(root, text="")
        self.length_label = tk.Label(root, text="Password Length:")
        self.length_entry = tk.Entry(root)
        self.generate_button = tk.Button(root, text="Generate Password",
command=self.generate_password)

        self.password_label.pack(pady=10)
        self.password_display.pack()
        self.length_label.pack()
```

```
        self.length_entry.pack()
        self.generate_button.pack(pady=10)

    def generate_password(self):
        try:
            password_length = int(self.length_entry.get())
            if password_length <= 0:
                raise ValueError()
        except ValueError:
            messagebox.showerror("Error", "Invalid password length. Please enter a positive
integer.")
            return

        characters = string.ascii_letters
        password = ''.join(random.choice(characters) for _ in range(password_length))
        self.password_display.config(text=password)

if name == " main ":
    root = tk.Tk()
    app = PasswordGeneratorApp(root)
    root.mainloop()
```