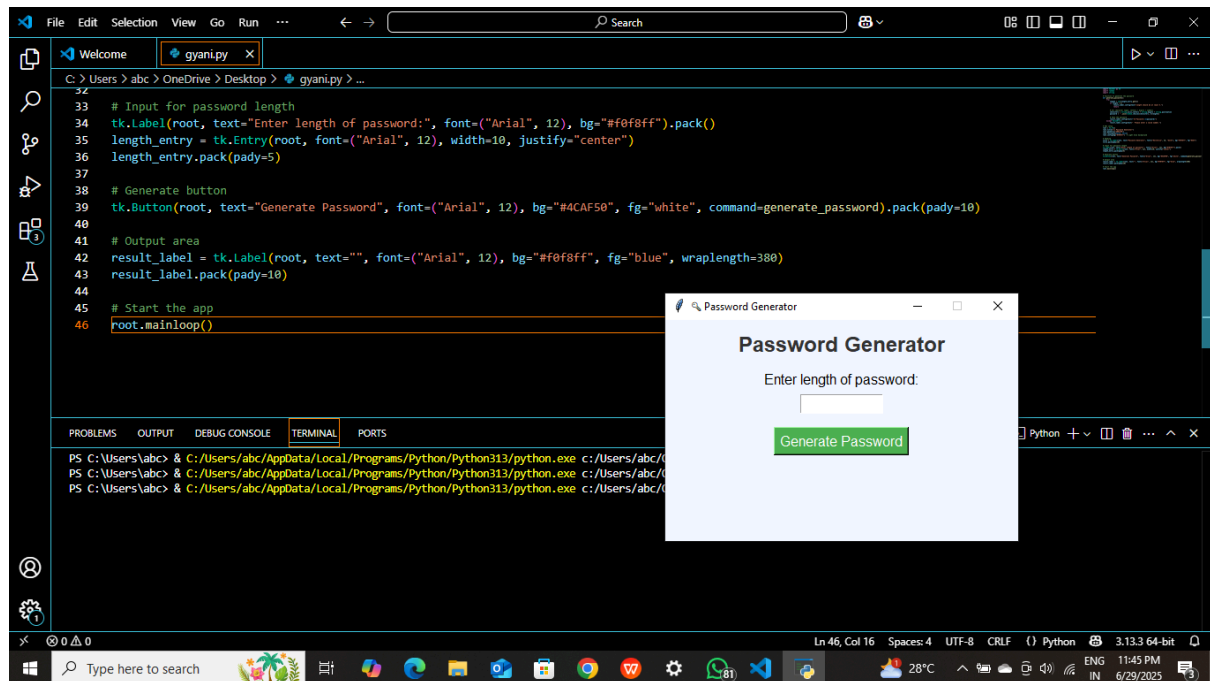


# PASSWORD Generator



```
import tkinter as tk
```

```
import random
```

```
import string
```

```
# Function to generate the password
```

```
def generate_password():
```

```
    try:
```

```
        length = int(length_entry.get())
```

```
        if length < 4:
```

```
            result_label.config(text="Length should be at least 4.")
```

```
        return
```

```
    # All character types: letters + digits + symbols
```

```
    characters = string.ascii_letters + string.digits + string.punctuation
```

```
    password = "".join(random.choices(characters, k=length))
```

```
    # Show the password
```

```
    result_label.config(text=f"🔑 Password:\n{password}")
```

```
except ValueError:
```

```
    result_label.config(text="⚠ Please enter a valid number.")
```

```
# GUI setup
```

```
root = tk.Tk()
```

```
root.title("🔑 Password Generator")
```

```
root.geometry("400x250")
```

```
root.resizable(False, False)
```

```
root.config(bg="#f0f8ff") # Light blue background
```

```
# Heading
title = tk.Label(root, text="Password Generator", font=("Helvetica", 18, "bold"), bg="#f0f8ff",
fg="#333")
title.pack(pady=10)

# Input for password length
tk.Label(root, text="Enter length of password:", font=("Arial", 12), bg="#f0f8ff").pack()
length_entry = tk.Entry(root, font=("Arial", 12), width=10, justify="center")
length_entry.pack(pady=5)

# Generate button
tk.Button(root, text="Generate Password", font=("Arial", 12), bg="#4CAF50", fg="white",
command=generate_password).pack(pady=10)

# Output area
result_label = tk.Label(root, text="", font=("Arial", 12), bg="#f0f8ff", fg="blue",
wraplength=380)
result_label.pack(pady=10)

# Start the app
root.mainloop()
```

