```
In [18]: pip install pyperclip
```

Requirement already satisfied: pyperclip in c:\users\roy62\anaconda3\lib\site-pac kages (1.9.0)Note: you may need to restart the kernel to use updated packages.

## Simple tkinter app

```
In [36]: import tkinter as tk

# function to called when button is clicked
def on_button_click():
    label.config(text = 'Button clicked')

#create the main application window
root = tk.Tk()
root.title('Simple tkinter app')

#create label widget
label = tk.Label(root, text = 'hello Tkinter')
label.pack(pady=20)

# button creation
button = tk.Button(root, text = 'Click me ', command = on_button_click)
button.pack(pady=20)

root.mainloop()
```

## **Password Generator**

```
In [34]: from tkinter import *
         import random, string
         import pyperclip
         root = Tk()
         root.geometry("400x400")
         root.resizable(0,0)
         root.title("PYTHON PROJECT - PASSWORD GENERATOR")
         Label(root, text='PASSWORD GENERATOR', font='arial 15 bold').pack()
         Label(root, text='Python', font='arial 15 bold').pack(side=BOTTOM)
         pass_label = Label(root, text='PASSWORD LENGTH', font='arial 10 bold').pack()
         pass len = IntVar()
         length = Spinbox(root, from_=8, to_=32, textvariable=pass_len, width=15).pack()
         pass_str = StringVar()
         def Generator():
             password = []
             # Ensuring at least one character from each type (Uppercase, Lowercase, Digi
             if pass_len.get() >= 4:
                 password.append(random.choice(string.ascii_uppercase))
                 password.append(random.choice(string.ascii_lowercase))
                 password.append(random.choice(string.digits))
                 password.append(random.choice(string.punctuation))
```

```
# Fill the rest with random choices until the specified length
                 for _ in range(pass_len.get() - 4):
                     password.append(random.choice(string.ascii_uppercase + string.ascii_
                 # Shuffle to ensure randomness
                 random.shuffle(password)
             else:
                 # If length is less than 4, just fill the required length with random ch
                 for _ in range(pass_len.get()):
                     password.append(random.choice(string.ascii_uppercase + string.ascii_
             # Convert list to string and set it to the variable
             pass_str.set(''.join(password))
        def Copy_password():
            pyperclip.copy(pass_str.get())
        Button(root, text='GENERATE PASSWORD', command=Generator).pack(pady=5)
        Entry(root, textvariable=pass_str).pack()
        Button(root, text='COPY TO CLIPBOARD', command=Copy_password).pack(pady=5)
        root.mainloop()
In [ ]:
```