

```
In [1]: from tkinter import *  
import random,string  
import pyperclip
```

```
In [2]: root=Tk()  
root.geometry('500x500')  
root.resizable(0,0)  
root.title('password generator')  
Label(root,text='PASSWORD GENERATOR',font='arial 20 bold').pack()  
Label(root,text='PYTHON',font='arial 15 bold').pack(side=BOTTOM)  
pass_length=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_string=StringVar()  
  
def generator():  
    password=[]  
    if pass_len.get()>=4:  
        password.append(random.choice(string.ascii_lowercase))  
        password.append(random.choice(string.ascii_uppercase))  
        password.append(random.choice(string.digits))  
        password.append(random.choice(string.punctuation))  
        for _ in range(pass_len.get()-4):  
            password.append(random.choice(string.ascii_lowercase+string.ascii_uppercase))  
        random.shuffle(password)  
    else:  
        for _ in range(pass_len.get()):  
            password.append(random.choice(string.ascii_lowercase+string.ascii_uppercase))  
    pass_string.set(''.join(password))  
  
def copy_password():  
    pyperclip.copy(pass_string.get())  
  
Button(root,text='GENERATE PASSWORD',command=generator).pack(pady=5)  
Entry(root,textvariable=pass_string).pack()  
Button(root,text='COPY TO CLIPBOARD',command=copy_password).pack(pady=5)  
  
root.mainloop()
```