OTP Validation

In [1]:

```
from tkinter import *
# For User interface
from tkinter import messagebox as mb
# For pop-up message boxes
#import hashlib
import smtplib
#import datetime
from random import *
# For password genetations
from email.message import EmailMessage
# For sending mails
import re
# For email validation

def create_account():
    # For validatign whether the OTP Entered by the user is correct or not
    def validate(rec_otp):
        if len(sender_otp.get()) == 6:
            if rec_otp == sender_otp.get():
                mb.showinfo("success", "Otp validated succesfully")
            else:
                mb.showerror("Try again", "Invalid otp!!\nTry again")
        else:
            mb.showerror("Error", "Please enter a valid otp")
    # For sending OTP
    '''Few Reasons that it fails to send the OTP
    1. User may have entered wrong mail
    2. There might be some server side issues or not connected to internet
    3. GMAIL is one of the secure service provider it does not allow any other users to login
    like an attacker and if it detects any malicious activity it warns the user. Here we are
    using one email to send OTP to other i.e user email for some reasons it may fail to login.
    We can overcome this by allowing permossions to login less secure devices in Account Settings'''
    def send_otp(rec, sender_otp):
        # Stripping out white spaces at both ends
        rec = rec.strip()
        # Regular expression for gmail validation
        regex = r'\b[A-Za-z0-9._%+-]+@[A-Za-z0-9.-]+\.[A-Z|a-z]{2,}\b'
        if re.fullmatch(regex, rec):
            try:
                #Create your SMTP session
                server = smtplib.SMTP('smtp.gmail.com', 587)
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            #Use TLS to add security
            server.starttls()

            #User Authentication
            server.login("pwdmanager2022@gmail.com","I love devil@7")
            otp = ""
            lis = [str(i) for i in range(10)]
            for i in range(6):
                otp += choice(lis)
            #Defining The Message
            sender_otp.set(otp)
            message = """Hey user!!!
            Welcome to password manager
            your 6 digit otp is {}""".format(otp)
            #Sending the Email
            email = EmailMessage()
            email["From"] = "pwdmanager2022@gmail.com"
            email["To"] = rec
            email["Subject"] = "Create Account"
            email.set_content(message)
            server.send_message(email)
            #smtp.sendmail("pwdmanager2022@gmail.com",rec,message)

            #Terminating the session
            server.quit()
            mb.showinfo("info", "OTP sent succesfully check your mail")#+str(sender_otp.get()))
            return
        except Exception as ex:
            mb.showerror("error", "Something went wrong plese try again")
            return
    else:
        mb.showerror("error", "Please enter valid email")
global cre_win
cre_win = Toplevel(win)
cre_win.geometry("500x380")
cre_win.title("Create account")
cre_win.resizable(0,0)
cre_win.config(bg = "#9AD9D6")
Label(cre_win, text = "Create your account", font = ("Comic Sans MS", 15), bg = "#9AD9D6").place(x = 140, y = 8)
Label(cre_win, text = "=========  ====== =========", font = ("Comic Sans Ms", 10), bg = "#9AD9D6").place(x = 140, y =
Label(cre_win, text = "Enter email : ", font=("Times New Roman", 13),bg = "#9AD9D6").place(x = 70, y = 70)
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    email_id = Entry(cre_win, width = 30, font = ( "Times New Roman", 9))
    email_id.place(x = 180, y = 70)
    sender_otp = StringVar()
    Button(cre_win, text = "Send OTP", font=('Helvetica', 12), bg='orange', command=lambda:send_otp(email_id.get(), sende
    Label(cre_win, text = "Enter otp : ", font =("Times New Roman", 13),bg = "#9AD9D6").place(x = 70, y = 140)
    rec_otp = Entry(cre_win, width = 30, font = ( "Times New Roman", 9))
    rec_otp.place(x = 180, y = 140)
    Button(cre_win, text = "Submit",font=('Helvetica', 12), bg='orange', command=lambda:validate(rec_otp.get())).place(x


# For generating passwords
def generate():
    def gen(pas):
        pa = ""
        lower = [chr(i) for i in range(ord('a'), ord('z')+1)]
        upper = [chr(i) for i in range(ord('A'), ord("Z")+1)]
        digits = [str(i) for i in range(10)]
        special_characters = [i for i in "!#$%*( :\)[]{}|,.?/@+-="]
        combined = lower + upper + digits + special_characters
        pa = choice(upper) + choice(lower) + choice(digits) + choice(special_characters)
        for i in range(12):
            pa += choice(combined)
        pas.set(pa)
    global gen_win
    gen_win = Toplevel(win)
    gen_win.geometry('500x280')
    gen_win.title("Generate")
    gen_win.resizable(0,0)
    gen_win.config(bg = "#4cd273")
    password = StringVar()
    Label(gen_win, text = "Generate your password", font =("Comic Sans MS", 18), bg = "#4cd273").place(x = 140, y = 10)
    Button(gen_win, text='Generate', font=('Helvetica', 14), bg='orange', command=lambda:gen(password)).place(x=210, y=60

    Label(gen_win, text='Password is:', font=("Times New Roman", 15), bg='Bisque').place(
            x=205, y=115)
    text_entry = Entry(gen_win, width=40, text=password, state='readonly',font=("Times New Roman", 15))
    text_entry.place(x=45, y=165, height=40)


win = Tk()
win.geometry('700x400')
win.title("Password Manager")
```

```
win.resizable(0,0)
win.config(bg = '#1CF2E7')
info = r'''Hey Buddy!!!
This is Dev.
I am your password manager.
I keep your passwords safe and secure.
I can suggest you a secure passowrd if you need one.
'''
#mb.showinfo("Read me", info)
Label(win, text = "Password Manager", font =( 'Playfair Display', 25), bg = '#1CF2E7').place(x = 210, y = 20)
Button(win, text='Generate', width=25, font=('Times New Roman', 13), bg='SteelBlue', command=generate).place(
        x=240, y=100)
Button(win, text='Create Account', width=25, font=('Times New Roman', 13), bg='SteelBlue', command=create_account).place(
        x=240, y=160)
win.update()
win.mainloop()
```

In [ ]: