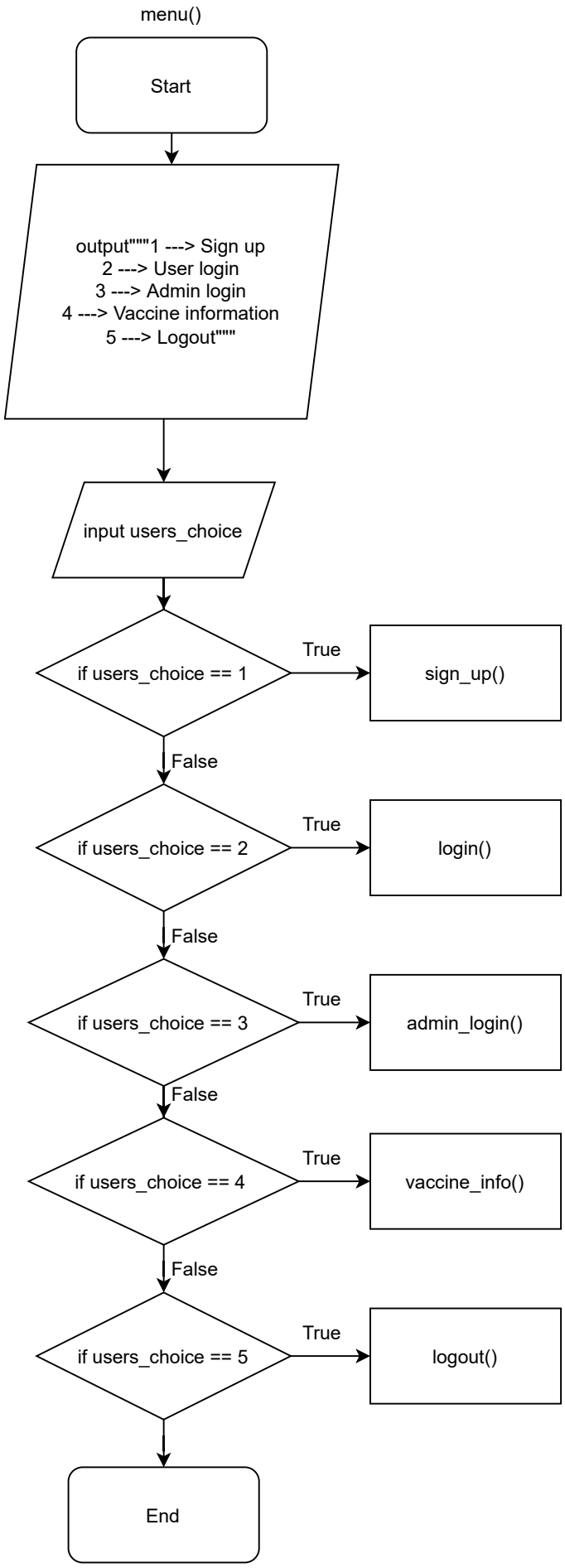
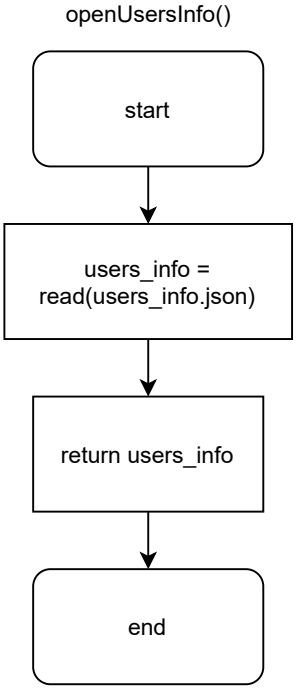
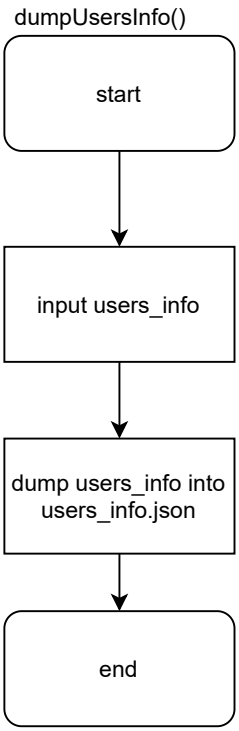
GROUP 5

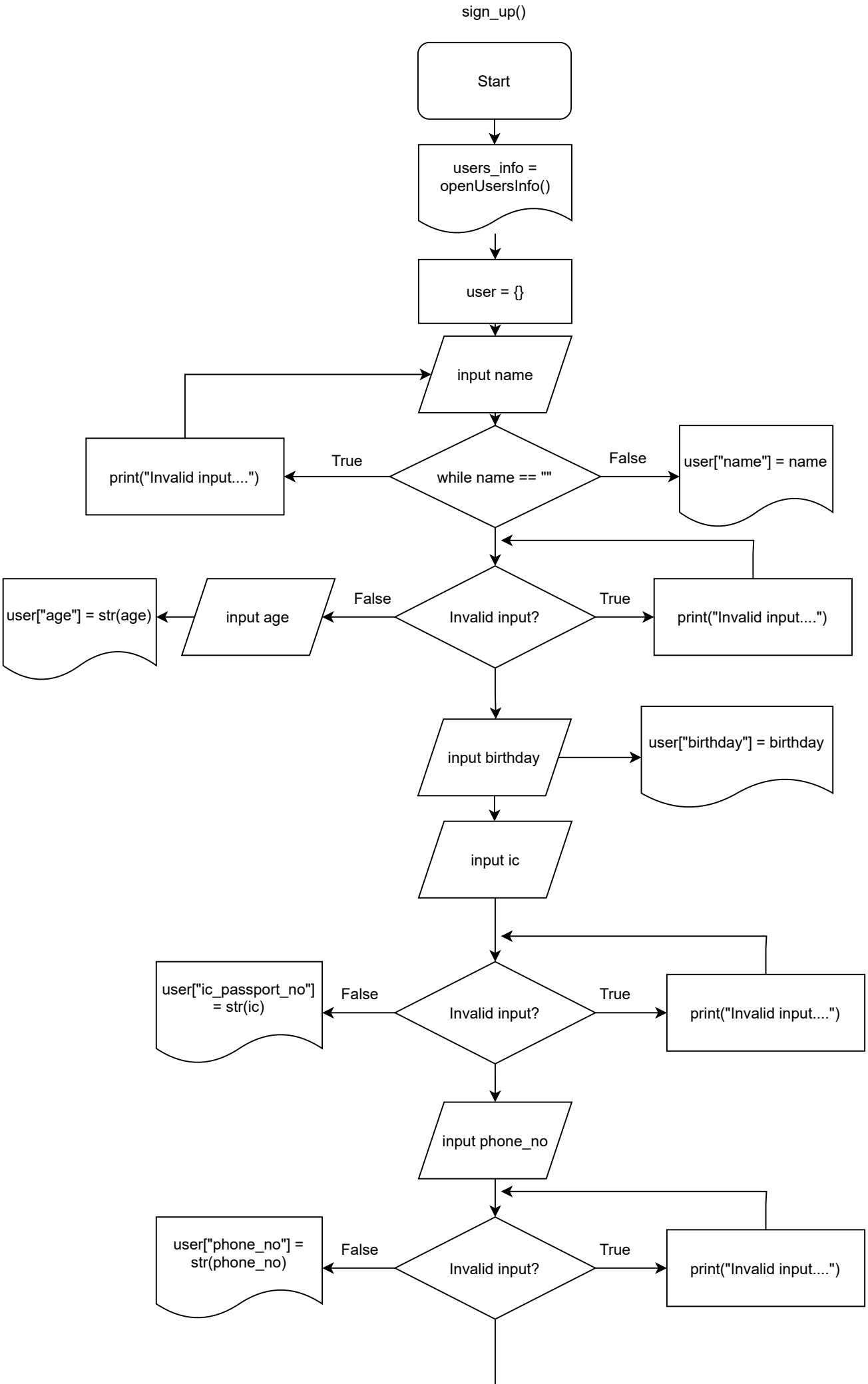
No.	ID	Name	Task Descriptions	Percentage (%)
1	1211102285	CHIN SHUANG YING	Categorize public users into high or low-risk(based on medical history) and priority rank(based on occupation) and sort public users based on age, postcode, COVID 19 risk and priority ranking.	
2	1211101022	ASHLEY SIM CI HUI	Administrators assign appointment, create vaccination centre, and generate list	
3	1211102398	NICHOLAS TIOW KAI BO	User's accounts sign up and login authentication	
4	1211100925	ANG JIN NAN	Public user login to respond for the assigned appointment and to view appointment	
			Total	100%

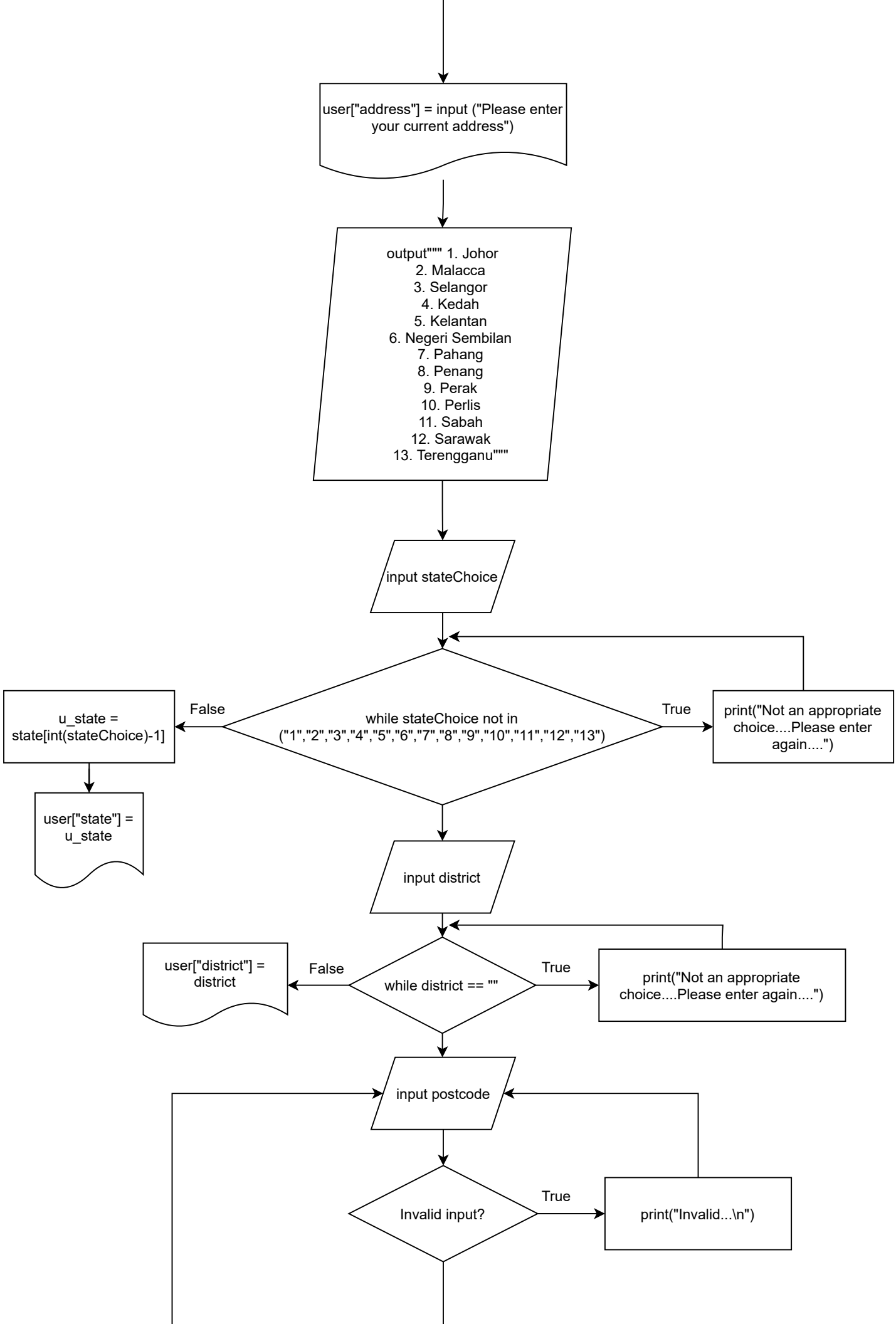
FLOWCHART

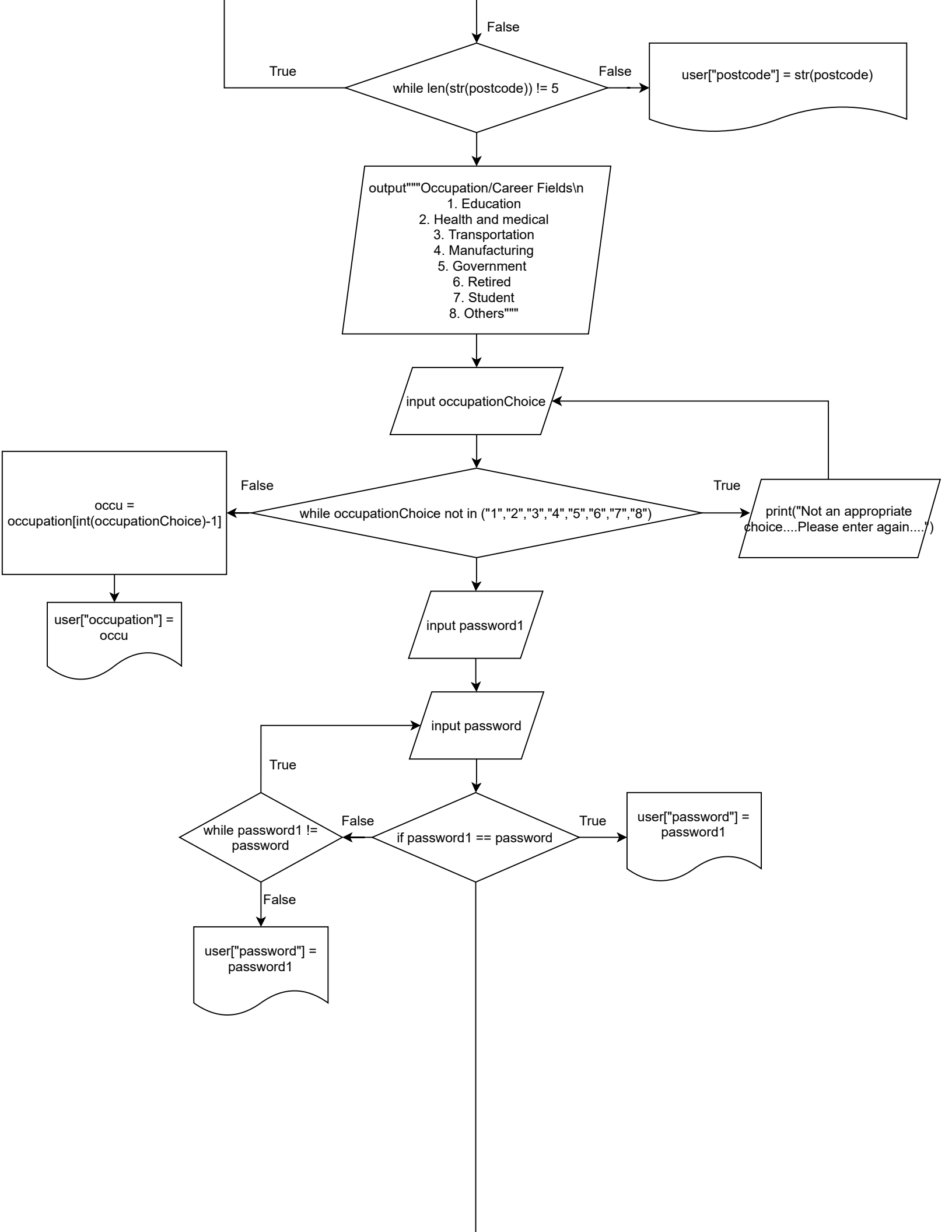

menu()
Start
output"""1 ---> Sign up
2 ---> User login
3 ---> Admin login
4 ---> Vaccine information
5 ---> Logout"""
input users_choice
if users_choice == 1
True
sign_up()
False
if users_choice == 2
True
login()
False
if users_choice == 3
True
admin_login()
False
if users_choice == 4
True
vaccine_info()
False
if users_choice == 5
True
logout()
End

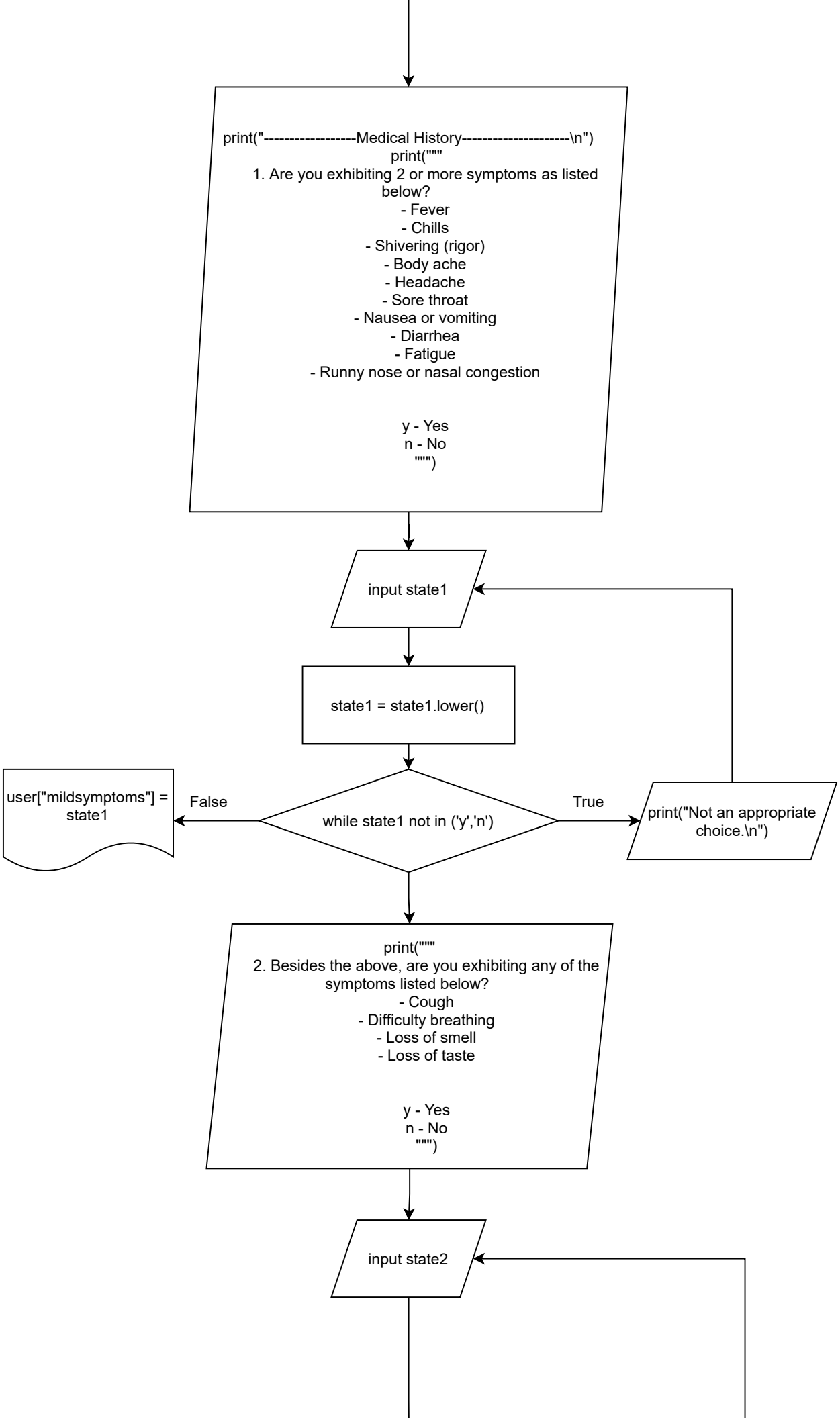

openUsersInfo()
start
users_info =
read(users_info.json)
return users_info
end

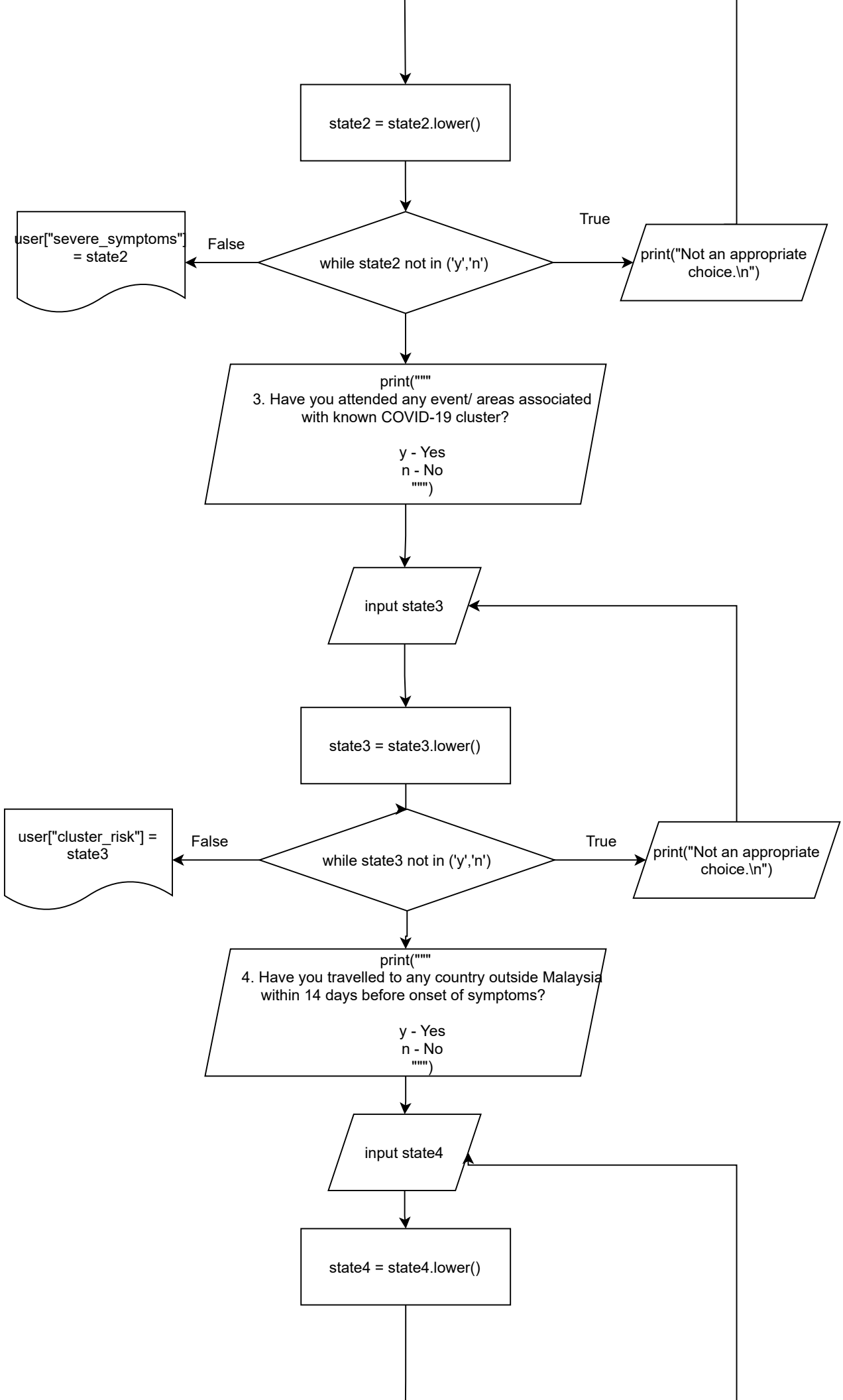

dumpUsersInfo()
start
input users_info
dump users_info into users_info.json
end

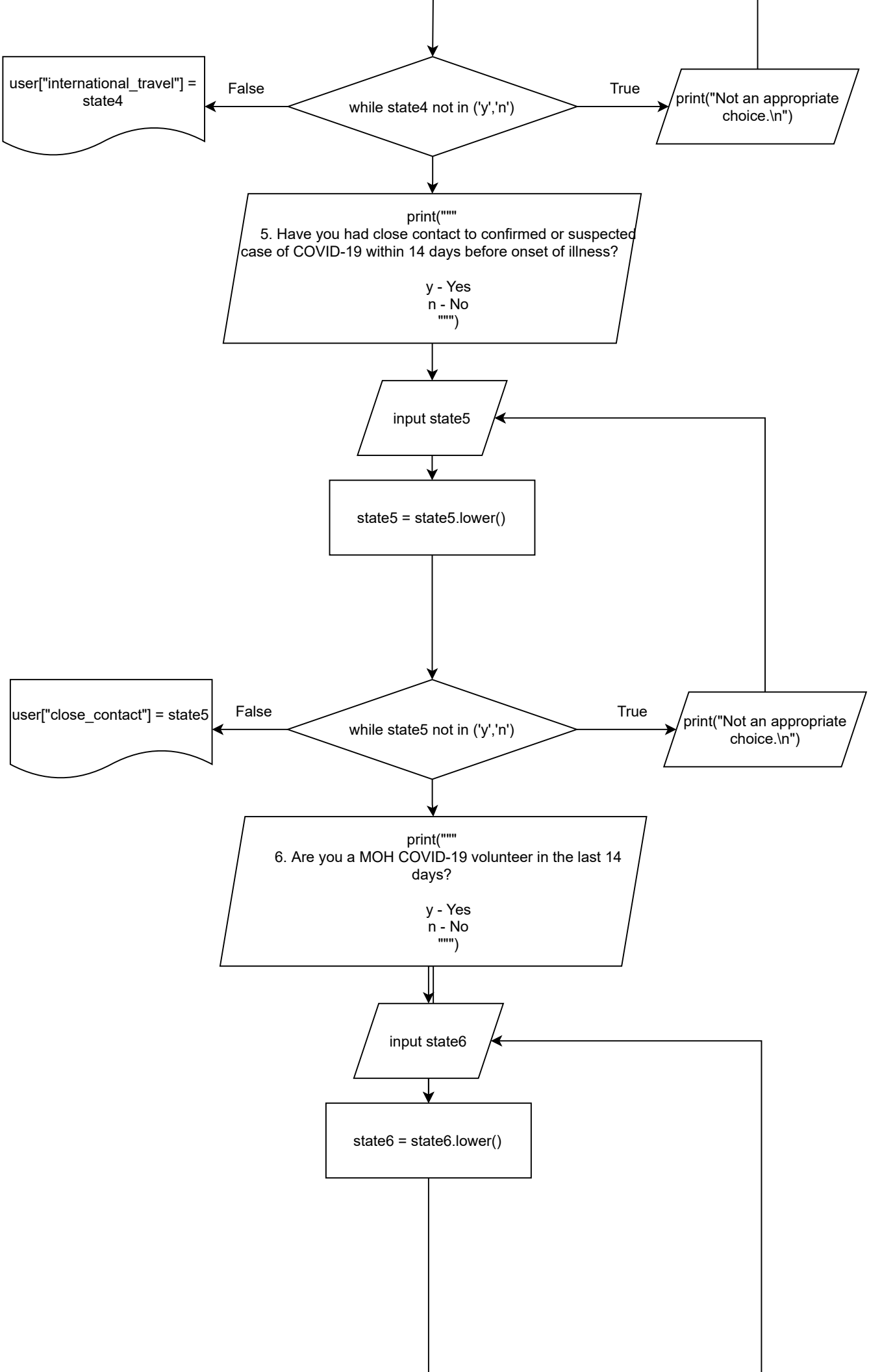

sign_up()
Start
users_info = openUsersInfo()
user = {}
input name
while name == ""
True
print("Invalid input....")
False
user["name"] = name
Invalid input?
True
print("Invalid input....")
False
input age
user["age"] = str(age)
input birthday
user["birthday"] = birthday
input ic
Invalid input?
True
print("Invalid input....")
False
user["ic_passport_no"] = str(ic)
input phone_no
Invalid input?
True
print("Invalid input....")
False
user["phone_no"] = str(phone_no)

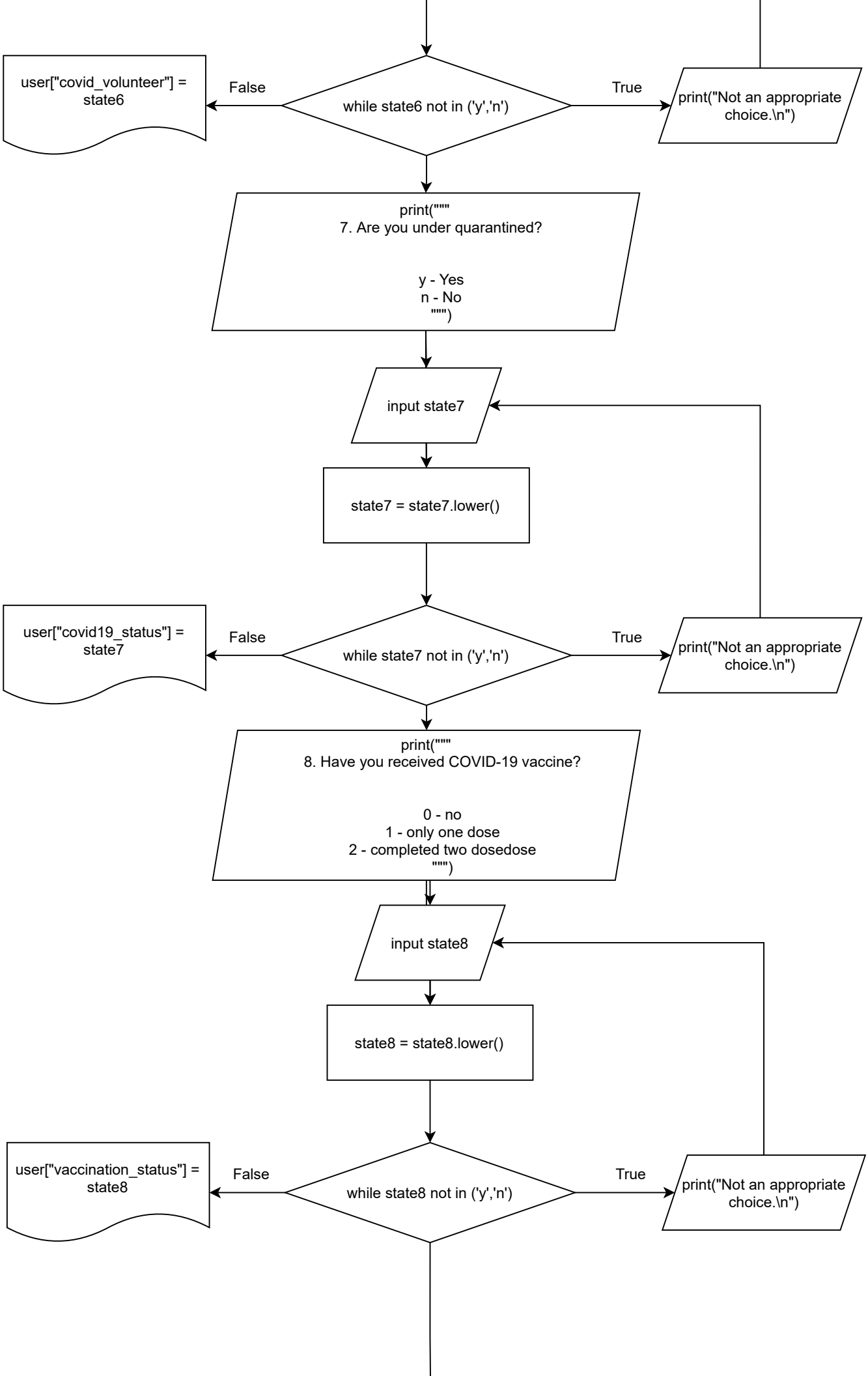

user["address"] = input ("Please enter your current address")
output""" 1. Johor
2. Malacca
3. Selangor
4. Kedah
5. Kelantan
6. Negeri Sembilan
7. Pahang
8. Penang
9. Perak
10. Perlis
11. Sabah
12. Sarawak
13. Terengganu"""
input stateChoice
while stateChoice not in ("1","2","3","4","5","6","7","8","9","10","11","12","13")
False
True
print("Not an appropriate choice....Please enter again....")
u_state = state[int(stateChoice)-1]
user["state"] = u_state
input district
while district == ""
False
True
print("Not an appropriate choice....Please enter again....")
user["district"] = district
input postcode
Invalid input?
True
print("Invalid...\n")

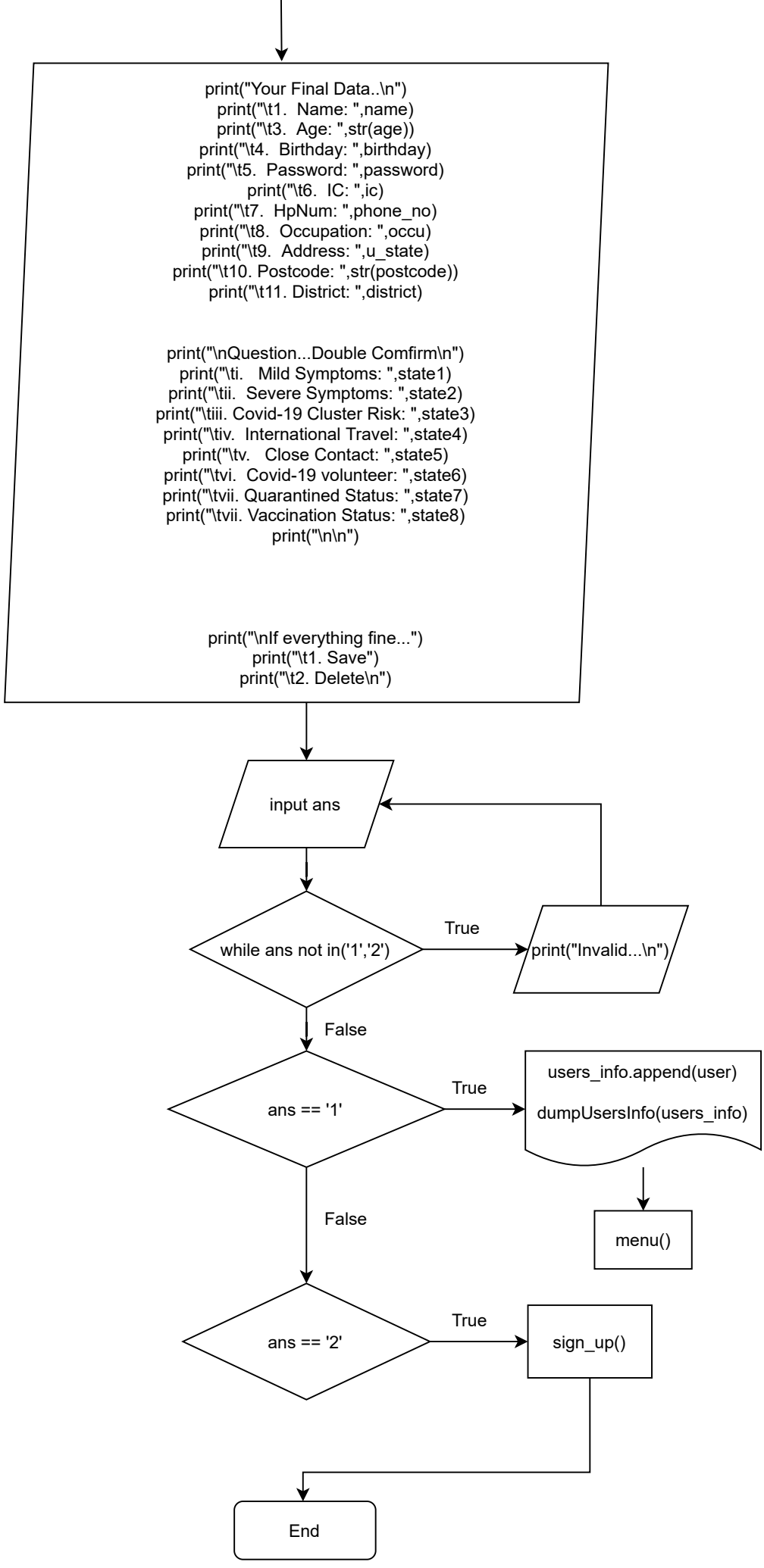

False
True
while len(str(postcode)) != 5
False
user["postcode"] = str(postcode)
output"""Occupation/Career Fields\n
1. Education
2. Health and medical
3. Transportation
4. Manufacturing
5. Government
6. Retired
7. Student
8. Others"""
input occupationChoice
occu =
occupation[int(occupationChoice)-1]
False
while occupationChoice not in ("1","2","3","4","5","6","7","8")
True
print("Not an appropriate
choice....Please enter again....")
user["occupation"] =
occu
input password1
input password
True
while password1 !=
password
False
if password1 == password
True
user["password"] =
password1
False
user["password"] =
password1

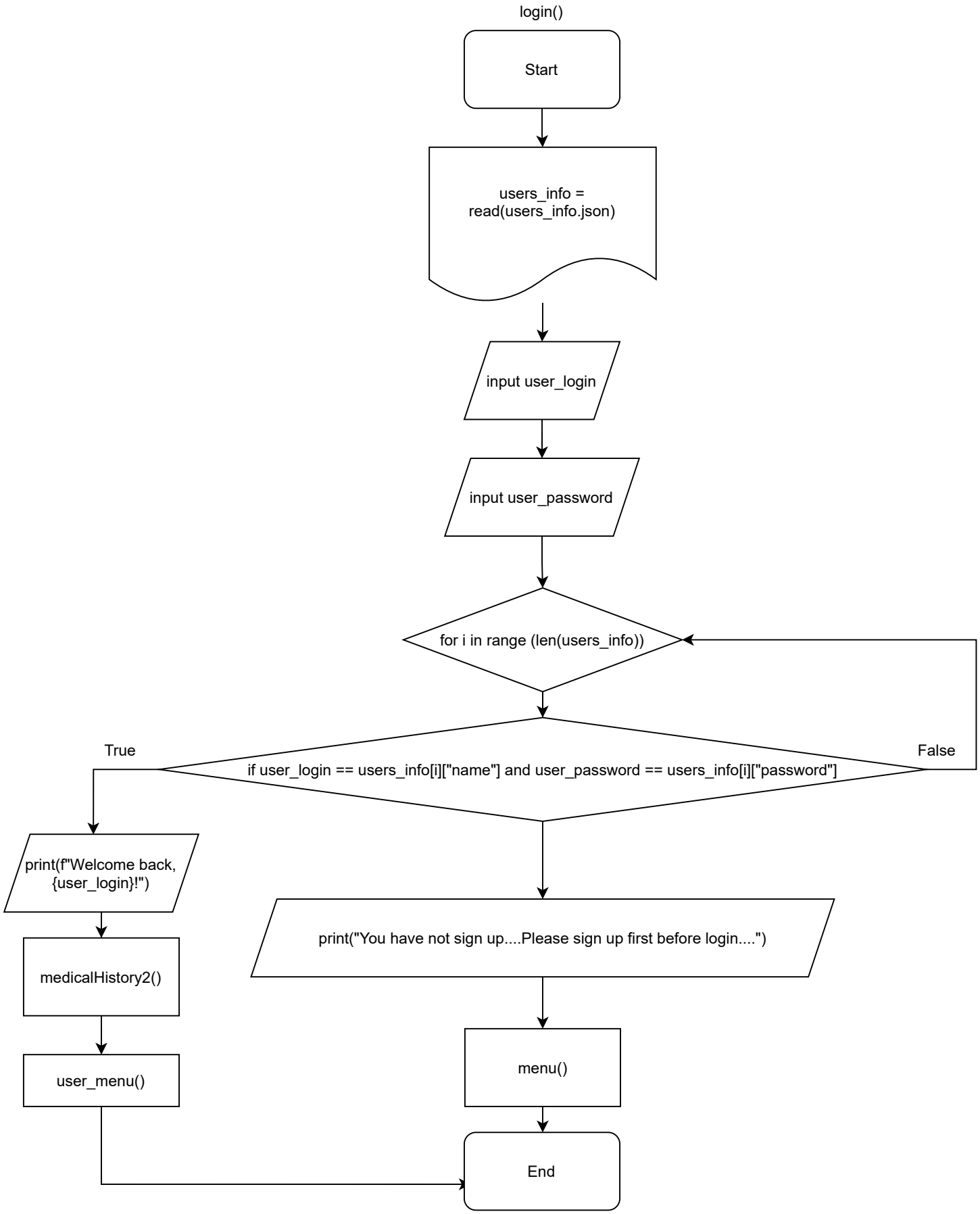

print("----------Medical History----------\n")
print("""
1. Are you exhibiting 2 or more symptoms as listed below?
- Fever
- Chills
- Shivering (rigor)
- Body ache
- Headache
- Sore throat
- Nausea or vomiting
- Diarrhea
- Fatigue
- Runny nose or nasal congestion
y - Yes
n - No
""")
input state1
state1 = state1.lower()
while state1 not in ('y','n')
False
user["mildsymptoms"] = state1
True
print("Not an appropriate choice.\n")
print("""
2. Besides the above, are you exhibiting any of the symptoms listed below?
- Cough
- Difficulty breathing
- Loss of smell
- Loss of taste
y - Yes
n - No
""")
input state2


state2 = state2.lower()
while state2 not in ('y','n')
False
user["severe_symptoms"] = state2
True
print("Not an appropriate choice.\n")
print("""
3. Have you attended any event/ areas associated with known COVID-19 cluster?
y - Yes
n - No
""")
input state3
state3 = state3.lower()
while state3 not in ('y','n')
False
user["cluster_risk"] = state3
True
print("Not an appropriate choice.\n")
print("""
4. Have you travelled to any country outside Malaysia within 14 days before onset of symptoms?
y - Yes
n - No
""")
input state4
state4 = state4.lower()

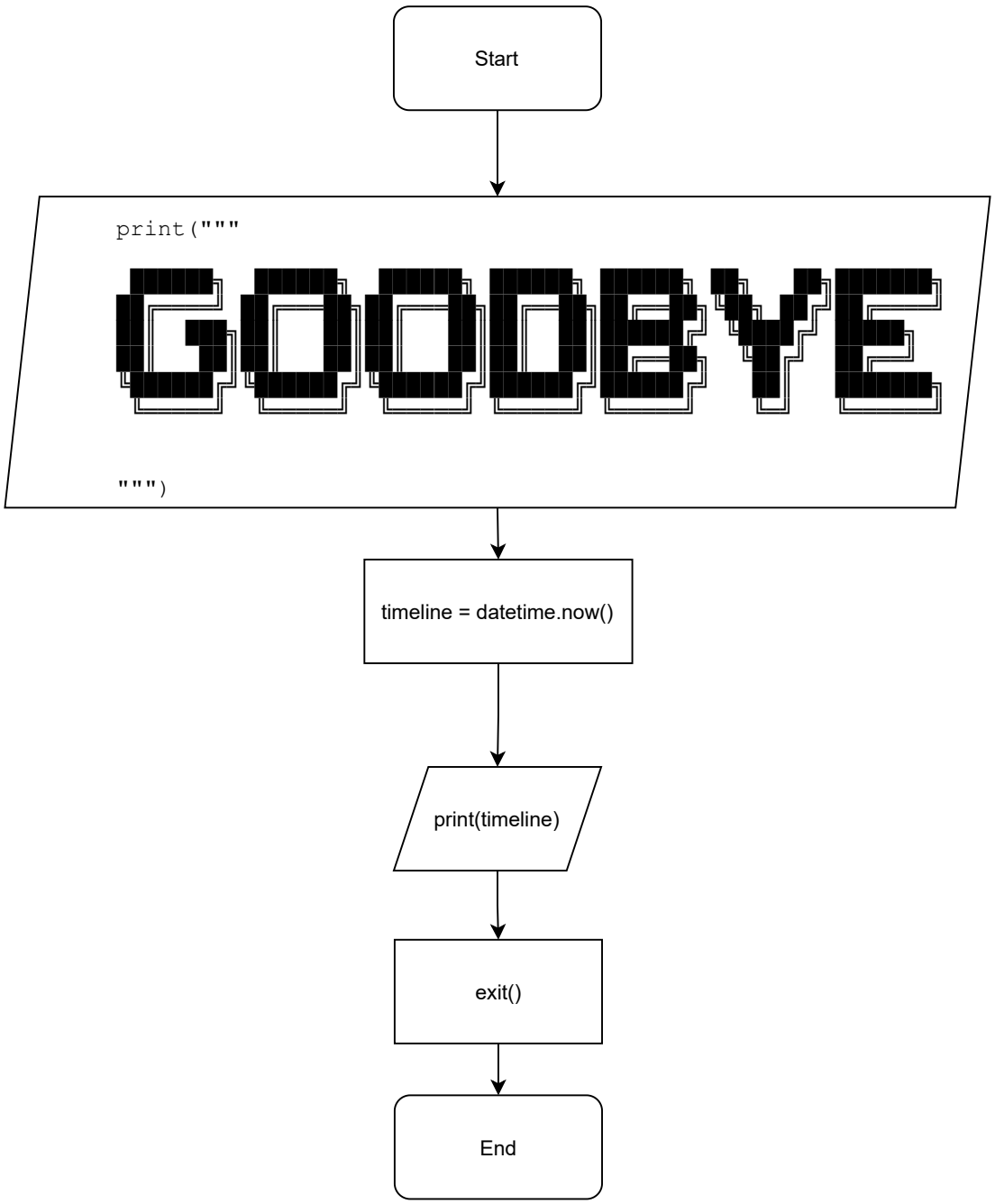

user["international_travel"] = state4
False
while state4 not in ('y','n')
True
print("Not an appropriate choice.\n")
print("""
5. Have you had close contact to confirmed or suspected case of COVID-19 within 14 days before onset of illness?
y - Yes
n - No
""")
input state5
state5 = state5.lower()
user["close_contact"] = state5
False
while state5 not in ('y','n')
True
print("Not an appropriate choice.\n")
print("""
6. Are you a MOH COVID-19 volunteer in the last 14 days?
y - Yes
n - No
""")
input state6
state6 = state6.lower()

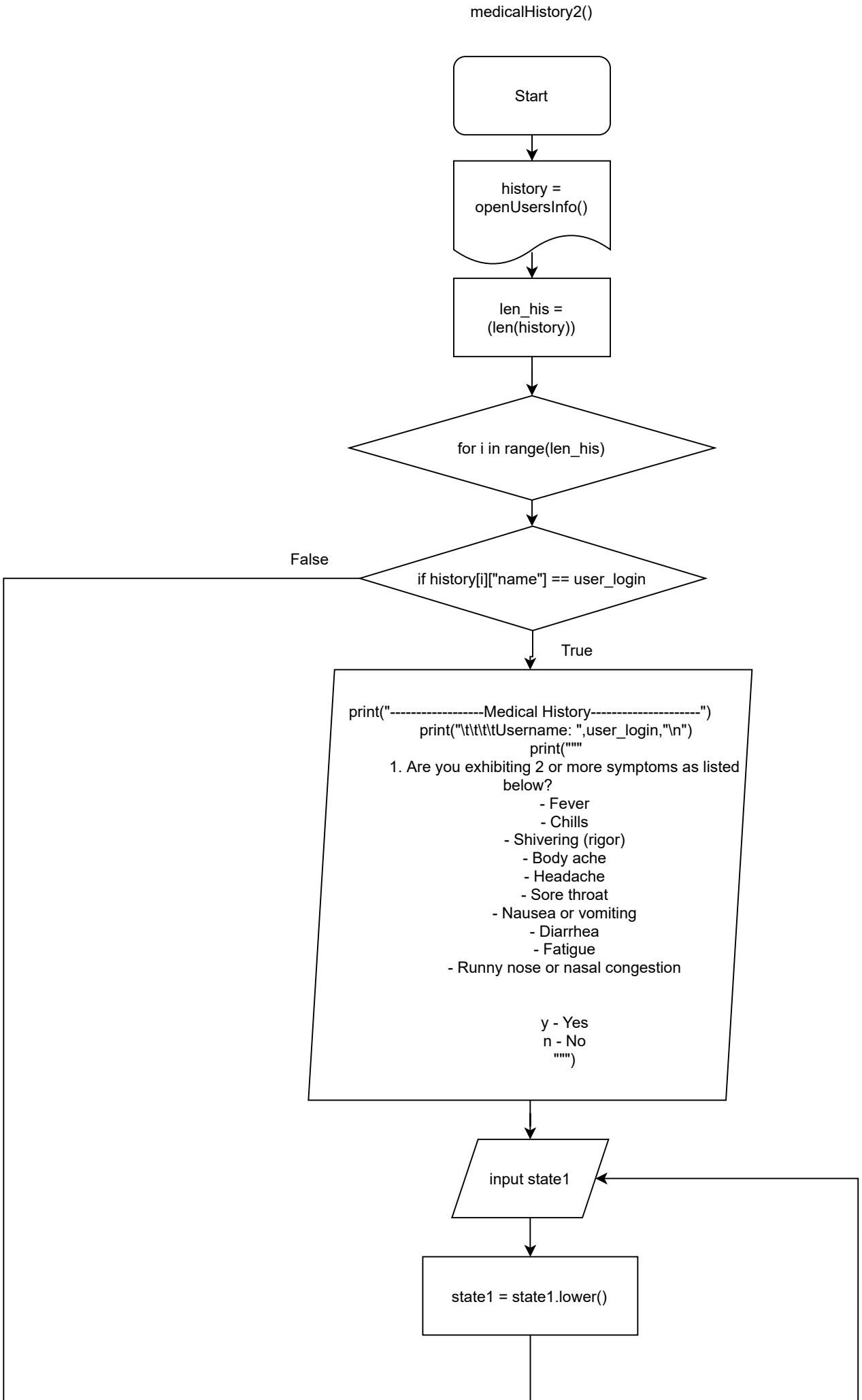

user["covid_volunteer"] = state6
False
while state6 not in ('y','n')
True
print("Not an appropriate choice.\n")
print("""
7. Are you under quarantined?
y - Yes
n - No
""")
input state7
state7 = state7.lower()
user["covid19_status"] = state7
False
while state7 not in ('y','n')
True
print("Not an appropriate choice.\n")
print("""
8. Have you received COVID-19 vaccine?
0 - no
1 - only one dose
2 - completed two dosedose
""")
input state8
state8 = state8.lower()
user["vaccination_status"] = state8
False
while state8 not in ('y','n')
True
print("Not an appropriate choice.\n")

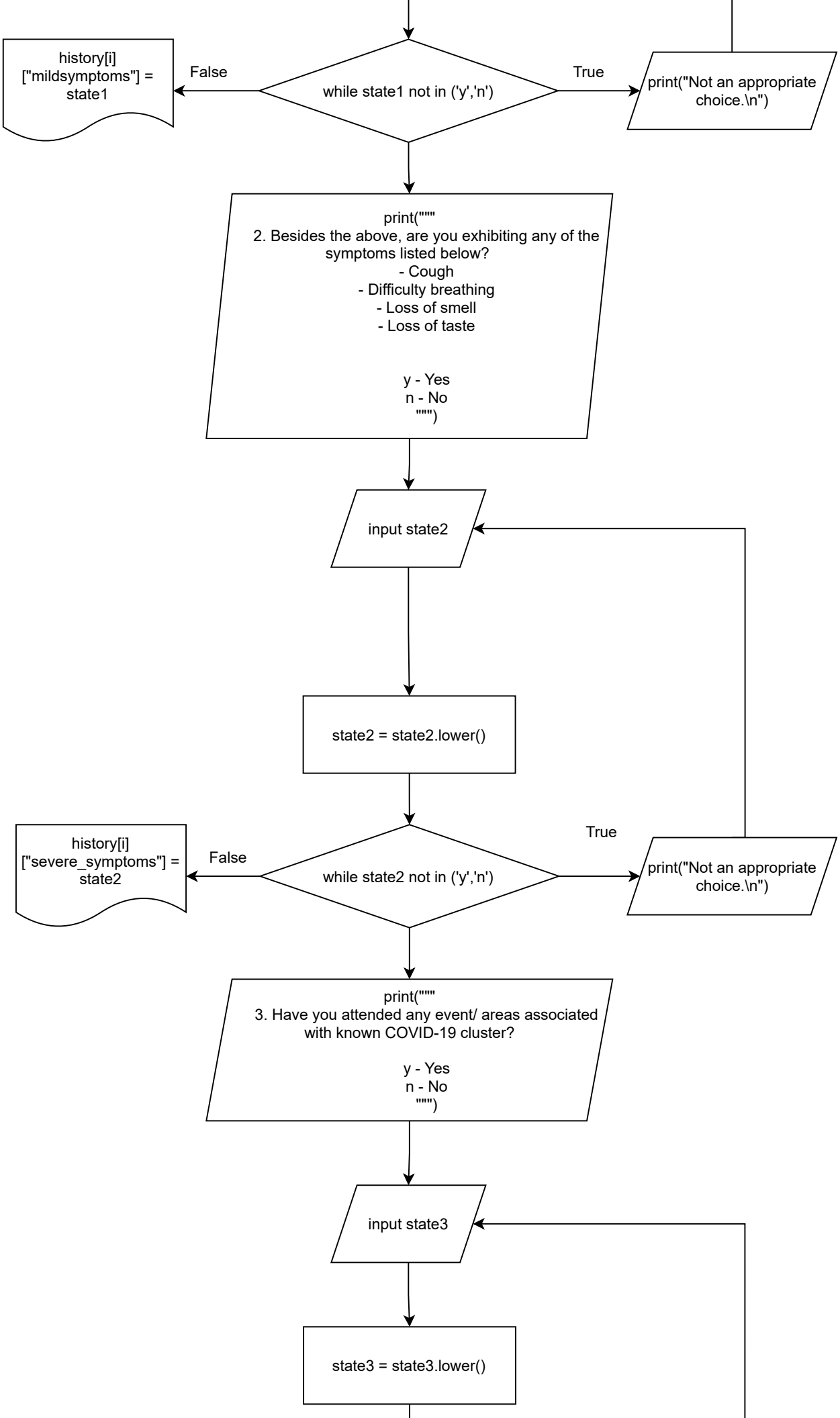

print("Your Final Data..\n")
print("\t1. Name: ",name)
print("\t3. Age: ",str(age))
print("\t4. Birthday: ",birthday)
print("\t5. Password: ",password)
print("\t6. IC: ",ic)
print("\t7. HpNum: ",phone_no)
print("\t8. Occupation: ",occu)
print("\t9. Address: ",u_state)
print("\t10. Postcode: ",str(postcode))
print("\t11. District: ",district)
print("\nQuestion...Double Comfirm\n")
print("\ti. Mild Symptoms: ",state1)
print("\tii. Severe Symptoms: ",state2)
print("\tiii. Covid-19 Cluster Risk: ",state3)
print("\tiv. International Travel: ",state4)
print("\tv. Close Contact: ",state5)
print("\tvi. Covid-19 volunteer: ",state6)
print("\tvii. Quarantined Status: ",state7)
print("\tvii. Vaccination Status: ",state8)
print("\n\n")
print("\nIf everything fine...")
print("\t1. Save")
print("\t2. Delete\n")
input ans
while ans not in('1','2')
True
print("Invalid...\n")
False
ans == '1'
True
users_info.append(user)
dumpUsersInfo(users_info)
menu()
False
ans == '2'
True
sign_up()
End

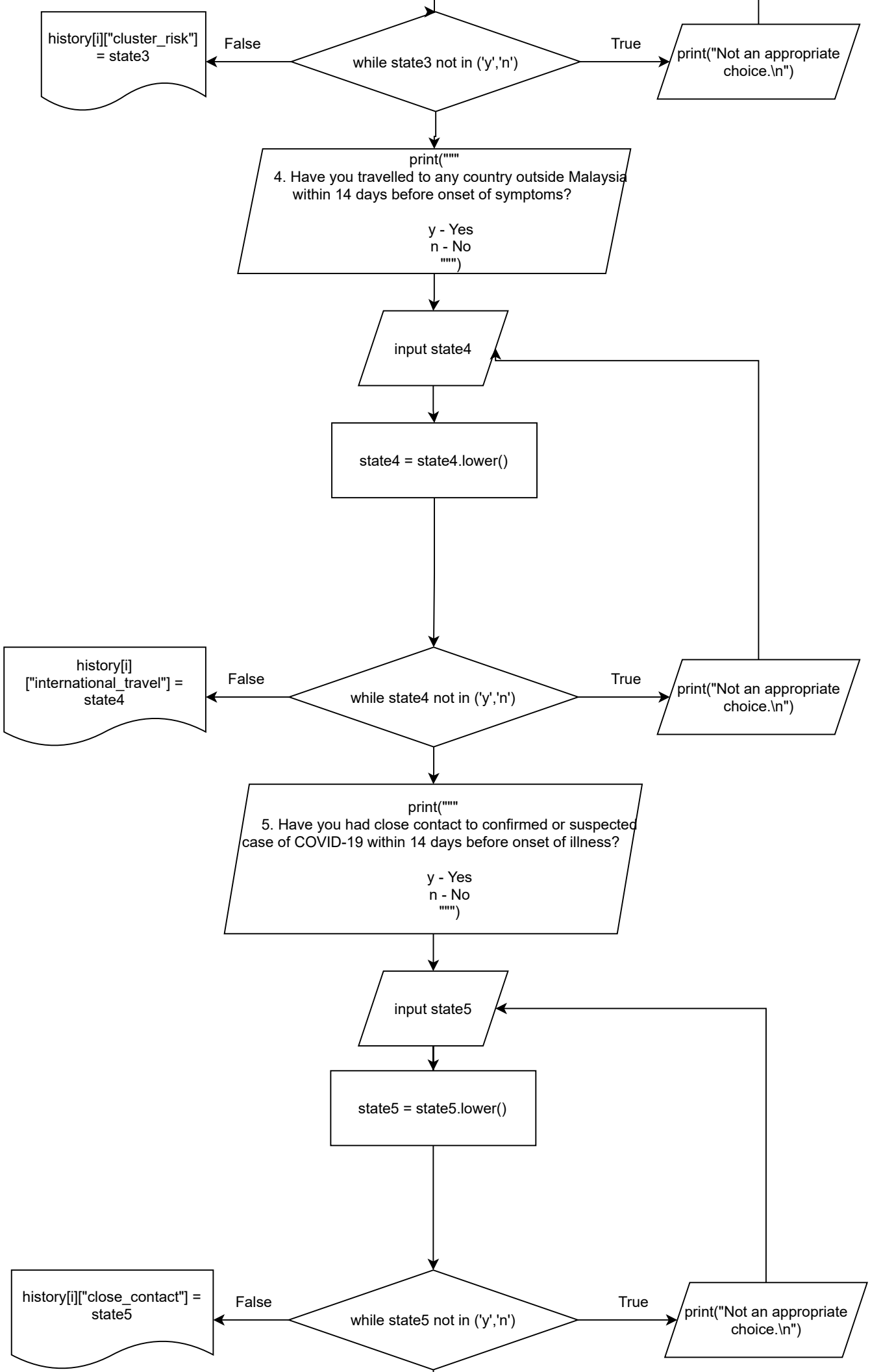

login()
Start
users_info = read(users_info.json)
input user_login
input user_password
for i in range (len(users_info))
True
False
if user_login == users_info[i]["name"] and user_password == users_info[i]["password"]
print(f"Welcome back, {user_login}!")
medicalHistory2()
user_menu()
print("You have not sign up....Please sign up first before login....")
menu()
End

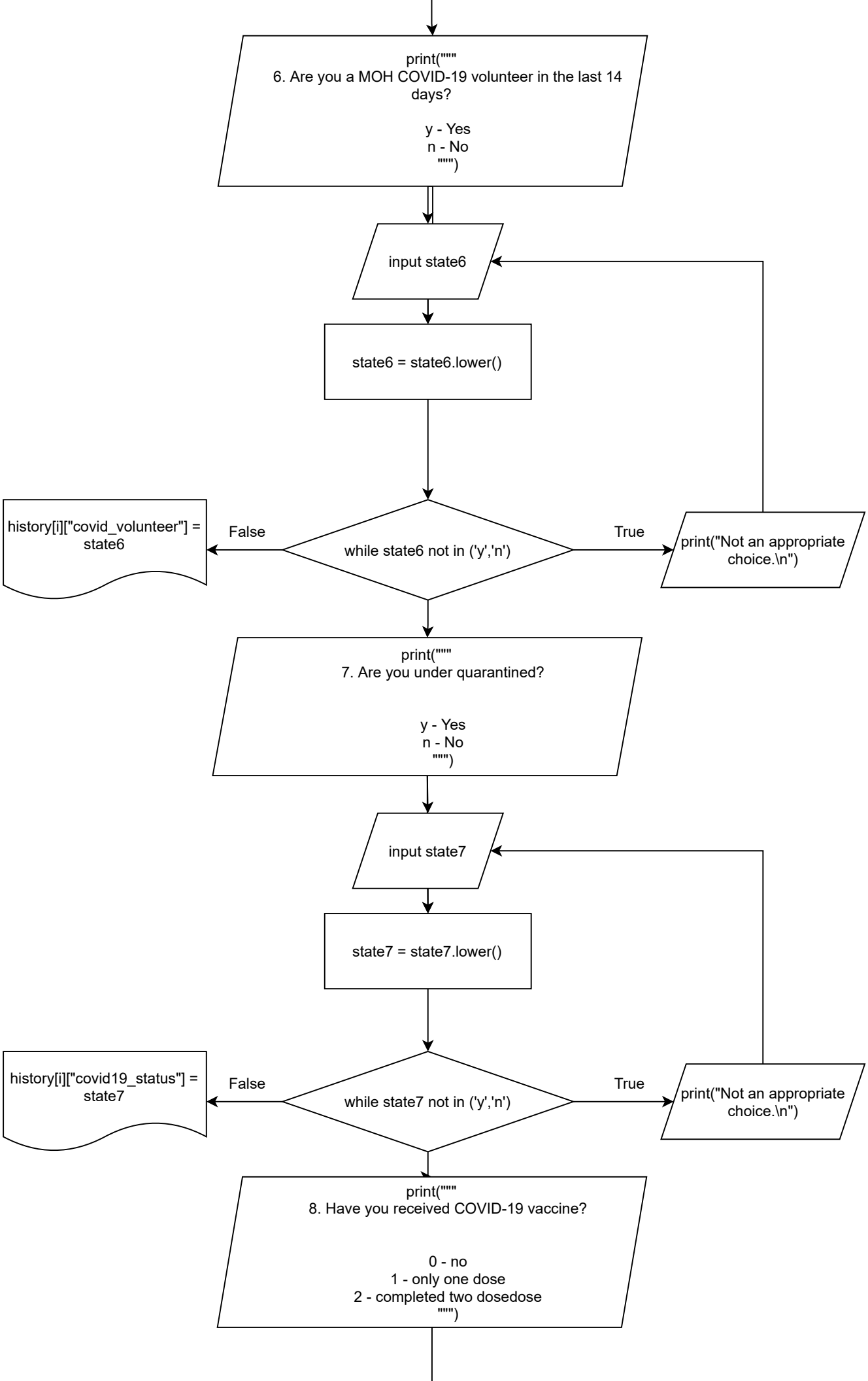
logout()

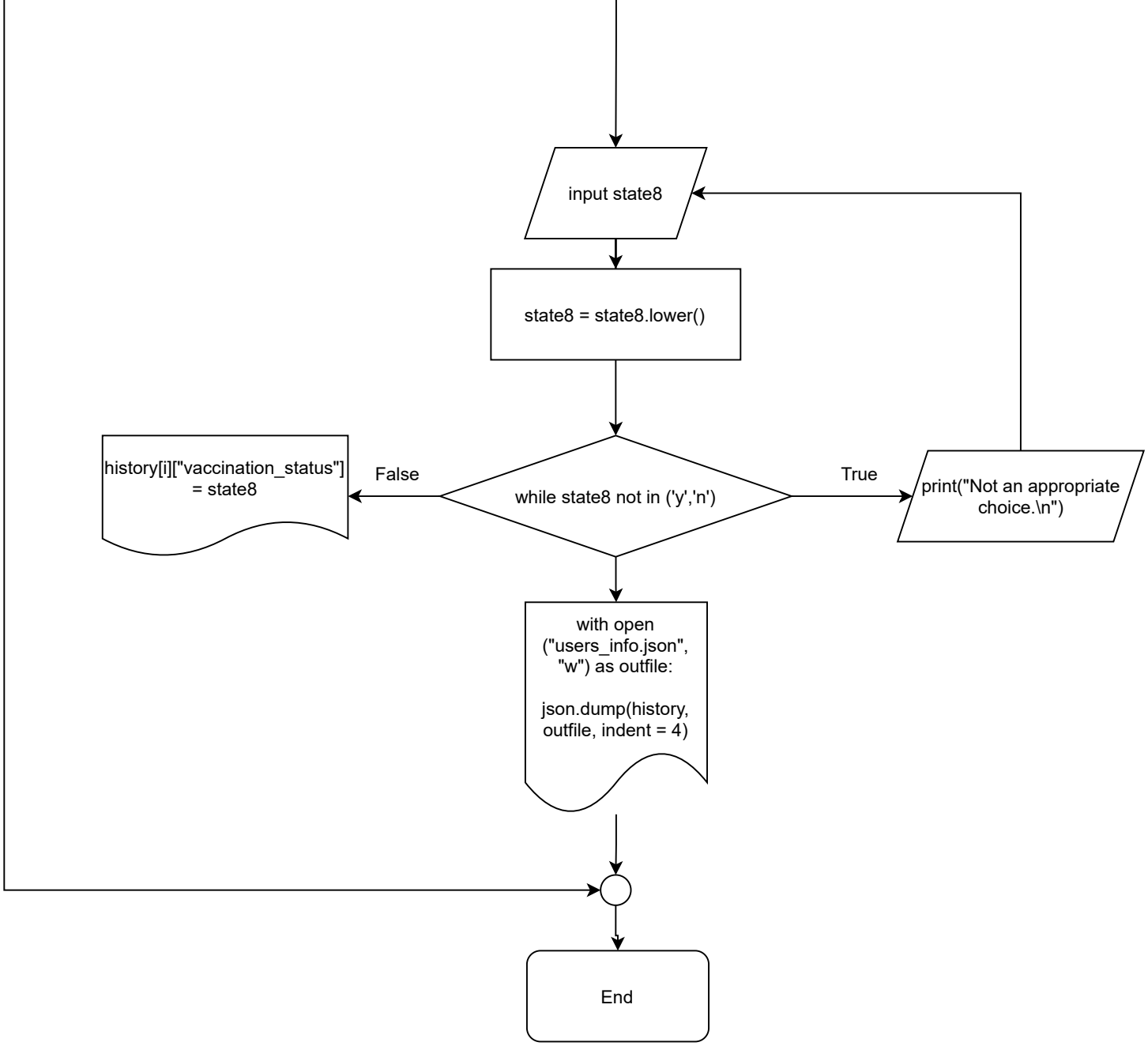

Start
print("""
GOODBYE
""")
timeline = datetime.now()
print(timeline)
exit()
End

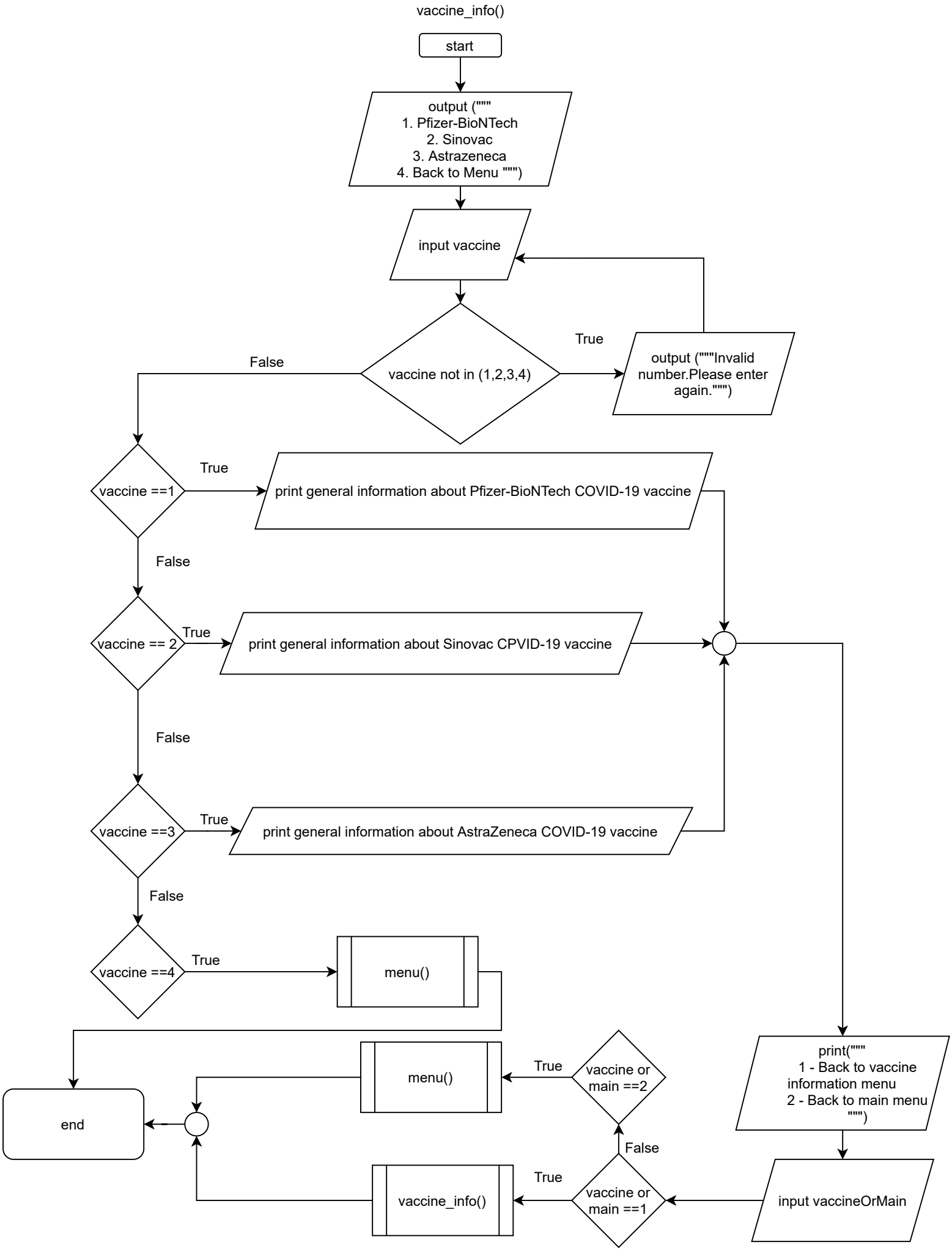

medicalHistory2()
Start
history = openUsersInfo()
len_his = (len(history))
for i in range(len_his)
if history[i]["name"] == user_login
False
True
print("------------------Medical History----------------------")
print("\t\t\t\tUsername: ",user_login,"\n")
print("""
1. Are you exhibiting 2 or more symptoms as listed below?
- Fever
- Chills
- Shivering (rigor)
- Body ache
- Headache
- Sore throat
- Nausea or vomiting
- Diarrhea
- Fatigue
- Runny nose or nasal congestion
y - Yes
n - No
""")
input state1
state1 = state1.lower()

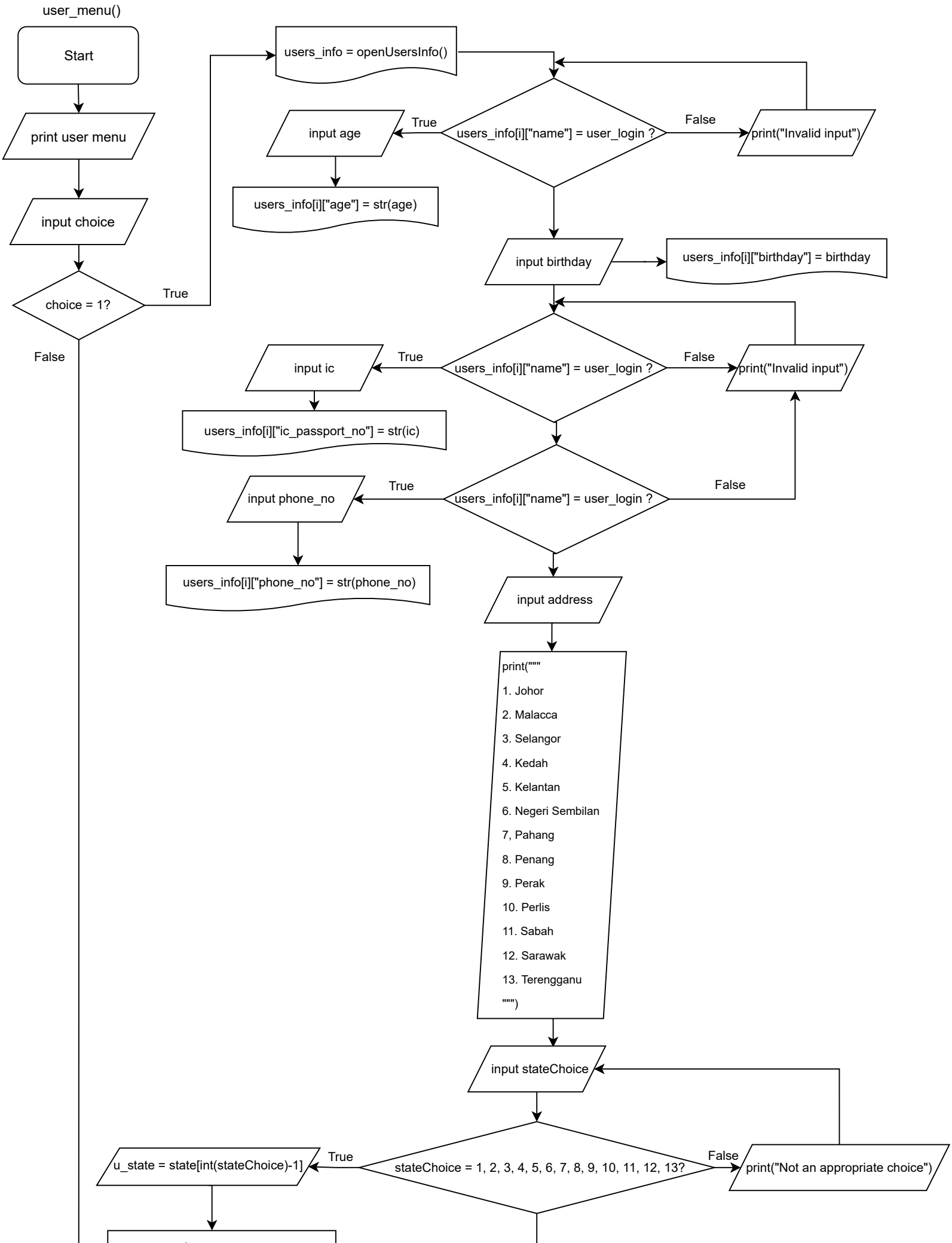

history[i]
["mildsymptoms"] =
state1
False
while state1 not in ('y','n')
True
print("Not an appropriate
choice.\n")
print("""
2. Besides the above, are you exhibiting any of the
symptoms listed below?
- Cough
- Difficulty breathing
- Loss of smell
- Loss of taste
y - Yes
n - No
""")
input state2
state2 = state2.lower()
history[i]
["severe_symptoms"] =
state2
False
while state2 not in ('y','n')
True
print("Not an appropriate
choice.\n")
print("""
3. Have you attended any event/ areas associated
with known COVID-19 cluster?
y - Yes
n - No
""")
input state3
state3 = state3.lower()

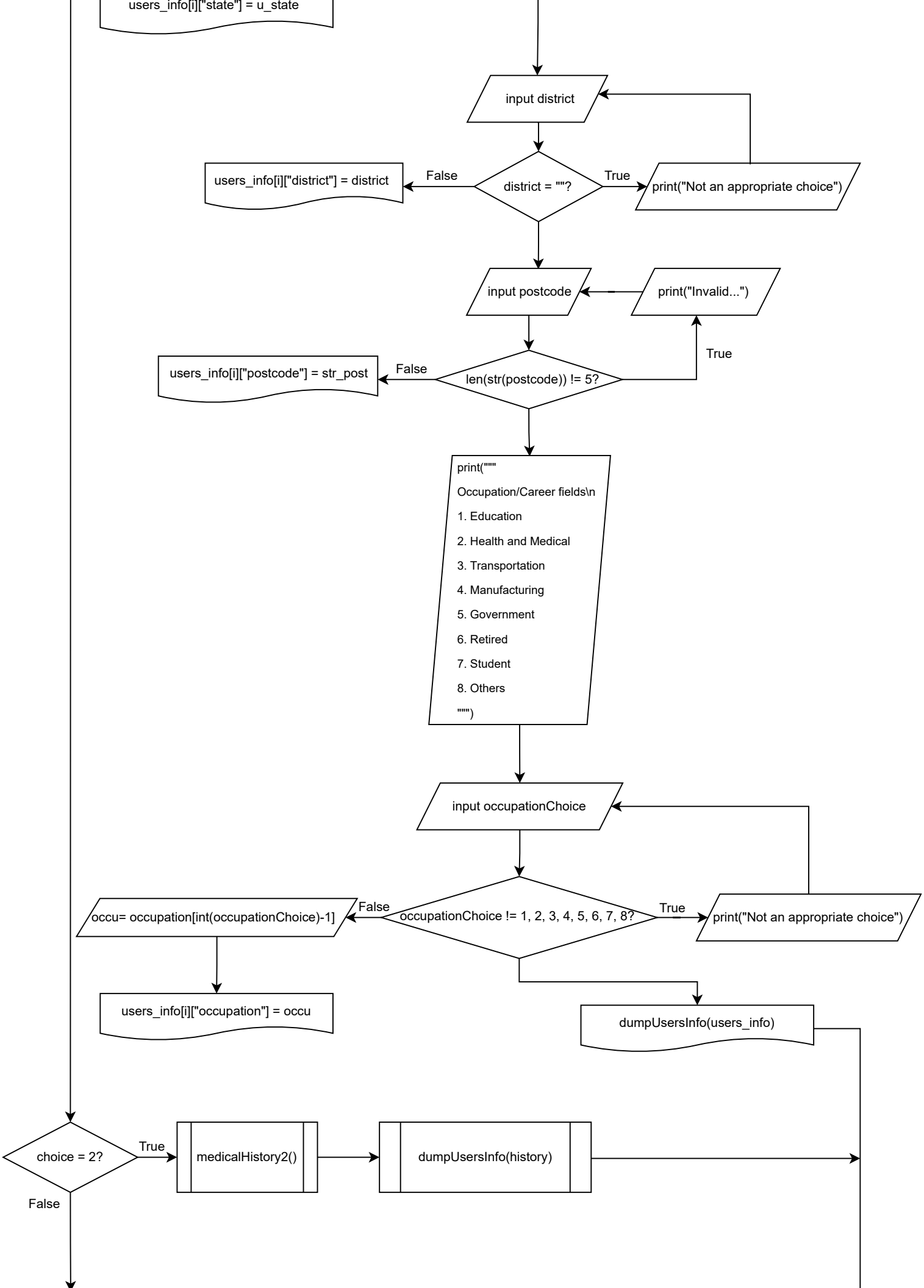

history[i]["cluster_risk"] = state3
False
while state3 not in ('y','n')
True
print("Not an appropriate choice.\n")
print("""
4. Have you travelled to any country outside Malaysia within 14 days before onset of symptoms?
y - Yes
n - No
""")
input state4
state4 = state4.lower()
history[i]["international_travel"] = state4
False
while state4 not in ('y','n')
True
print("Not an appropriate choice.\n")
print("""
5. Have you had close contact to confirmed or suspected case of COVID-19 within 14 days before onset of illness?
y - Yes
n - No
""")
input state5
state5 = state5.lower()
history[i]["close_contact"] = state5
False
while state5 not in ('y','n')
True
print("Not an appropriate choice.\n")

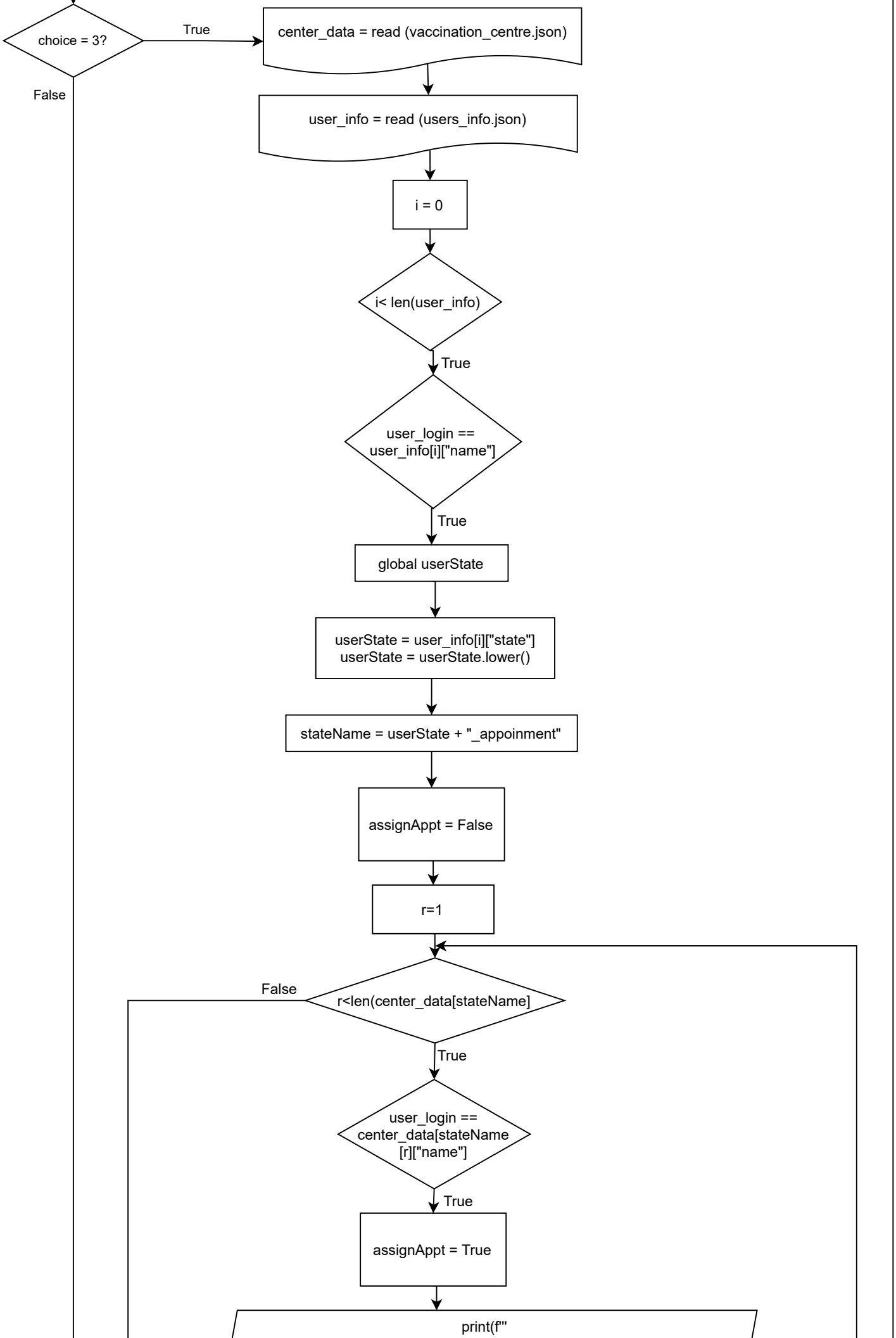

print("""
6. Are you a MOH COVID-19 volunteer in the last 14 days?
y - Yes
n - No
""")
input state6
state6 = state6.lower()
while state6 not in ('y','n')
False
history[i]["covid_volunteer"] = state6
True
print("Not an appropriate choice.\n")
print("""
7. Are you under quarantined?
y - Yes
n - No
""")
input state7
state7 = state7.lower()
while state7 not in ('y','n')
False
history[i]["covid19_status"] = state7
True
print("Not an appropriate choice.\n")
print("""
8. Have you received COVID-19 vaccine?
0 - no
1 - only one dose
2 - completed two dosedose
""")

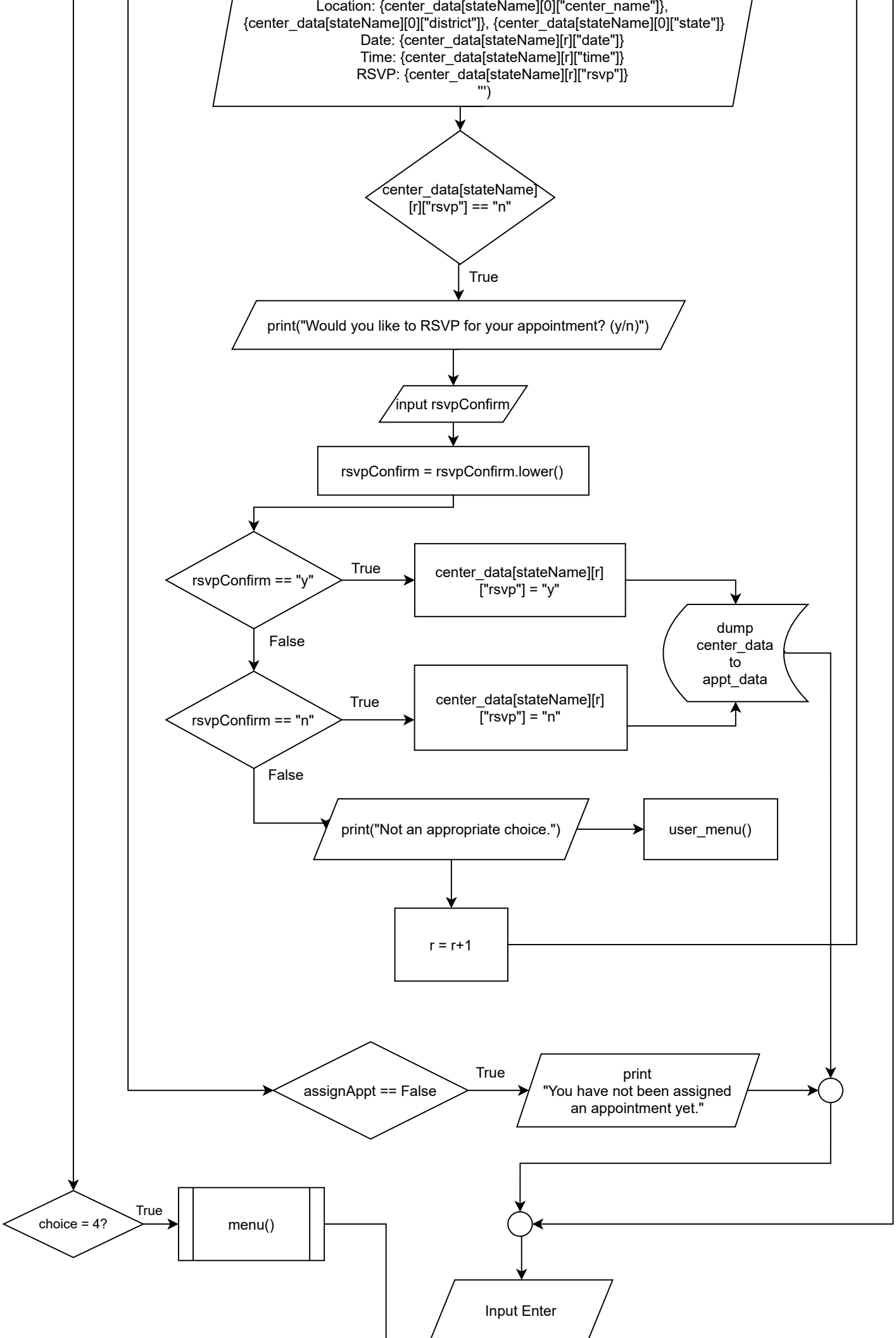

input state8
state8 = state8.lower()
while state8 not in ('y','n')
False
history[i]["vaccination_status"] = state8
True
print("Not an appropriate choice.\n")
with open ("users_info.json", "w") as outfile:
json.dump(history, outfile, indent = 4)
End

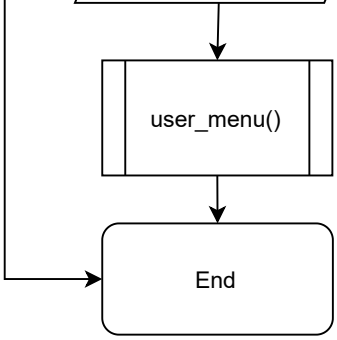

vaccine_info()
start
output (""" 1. Pfizer-BioNTech 2. Sinovac 3. Astrazeneca 4. Back to Menu """)
input vaccine
vaccine not in (1,2,3,4)
True
output ("""Invalid number.Please enter again.""")
False
vaccine ==1
True
print general information about Pfizer-BioNTech COVID-19 vaccine
False
vaccine == 2
True
print general information about Sinovac CPVID-19 vaccine
False
vaccine ==3
True
print general information about AstraZeneca COVID-19 vaccine
False
vaccine ==4
True
menu()
print(""" 1 - Back to vaccine information menu 2 - Back to main menu """)
input vaccineOrMain
vaccine or main ==1
True
vaccine_info()
False
vaccine or main ==2
True
menu()
end

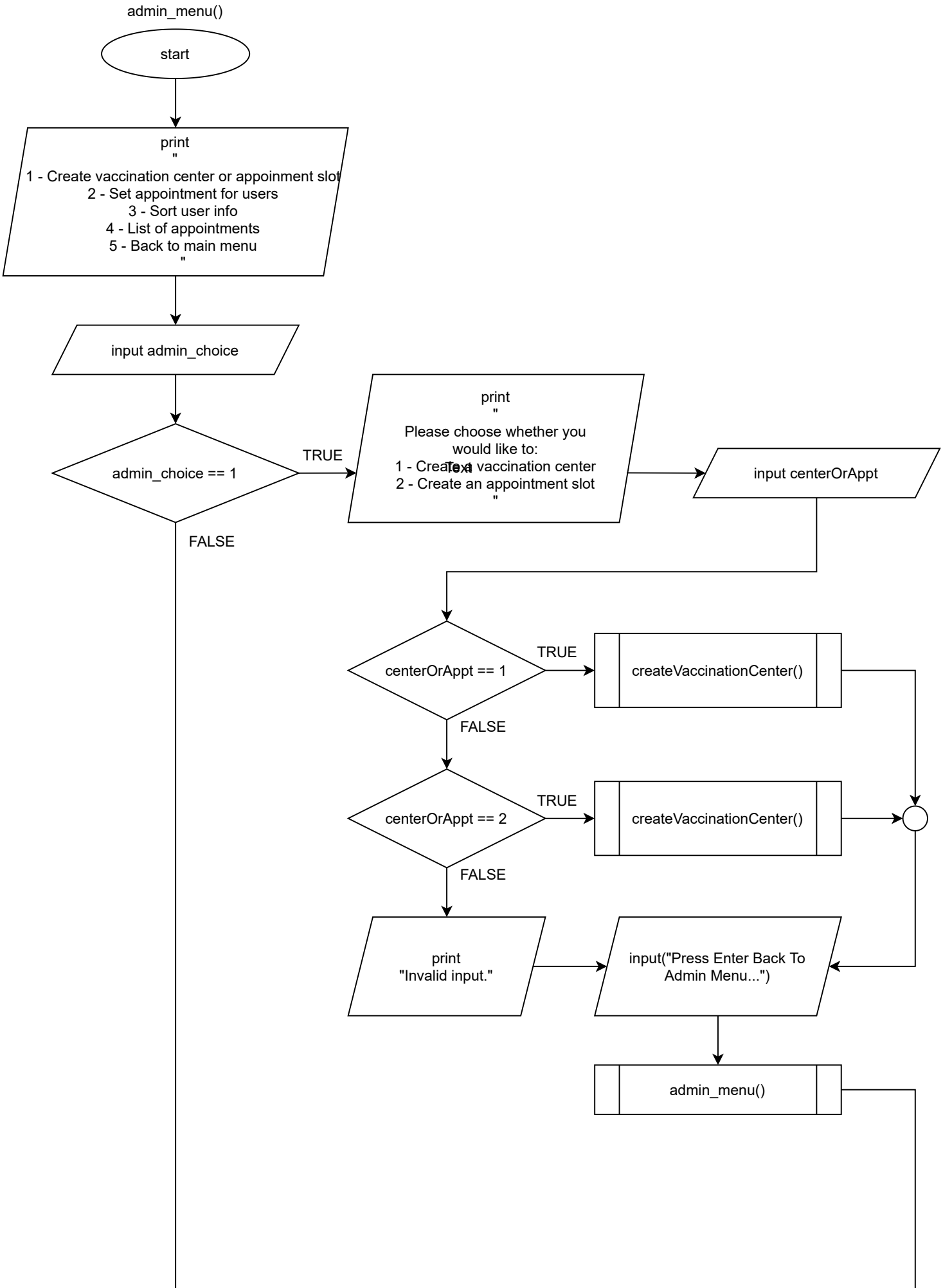

user_menu()
Start
print user menu
input choice
choice = 1?
True
False
users_info = openUsersInfo()
users_info[i]["name"] = user_login ?
True
input age
users_info[i]["age"] = str(age)
False
print("Invalid input")
input birthday
users_info[i]["birthday"] = birthday
users_info[i]["name"] = user_login ?
True
input ic
users_info[i]["ic_passport_no"] = str(ic)
False
print("Invalid input")
users_info[i]["name"] = user_login ?
True
input phone_no
users_info[i]["phone_no"] = str(phone_no)
False
input address
print("""
1. Johor
2. Malacca
3. Selangor
4. Kedah
5. Kelantan
6. Negeri Sembilan
7, Pahang
8. Penang
9. Perak
10. Perlis
11. Sabah
12. Sarawak
13. Terengganu
""")
input stateChoice
stateChoice = 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13?
True
u_state = state[int(stateChoice)-1]
False
print("Not an appropriate choice")

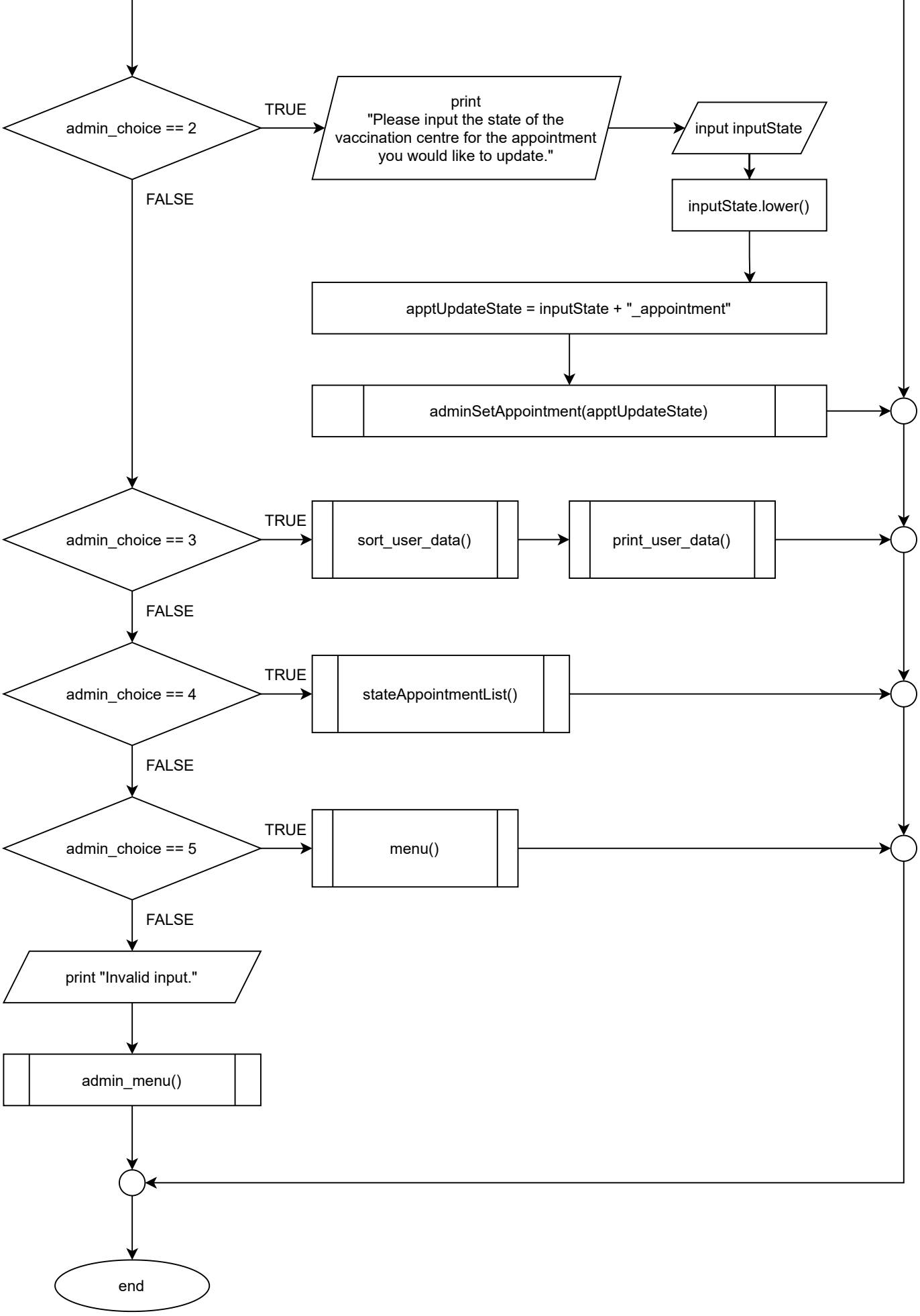

users_info[i]["state"] = u_state
input district
users_info[i]["district"] = district
False
district = ""?
True
print("Not an appropriate choice")
input postcode
print("Invalid...")
users_info[i]["postcode"] = str_post
False
len(str(postcode)) != 5?
True
print("""
Occupation/Career fields\n
1. Education
2. Health and Medical
3. Transportation
4. Manufacturing
5. Government
6. Retired
7. Student
8. Others
""")
input occupationChoice
occu= occupation[int(occupationChoice)-1]
False
occupationChoice != 1, 2, 3, 4, 5, 6, 7, 8?
True
print("Not an appropriate choice")
users_info[i]["occupation"] = occu
dumpUsersInfo(users_info)
choice = 2?
True
medicalHistory2()
dumpUsersInfo(history)
False

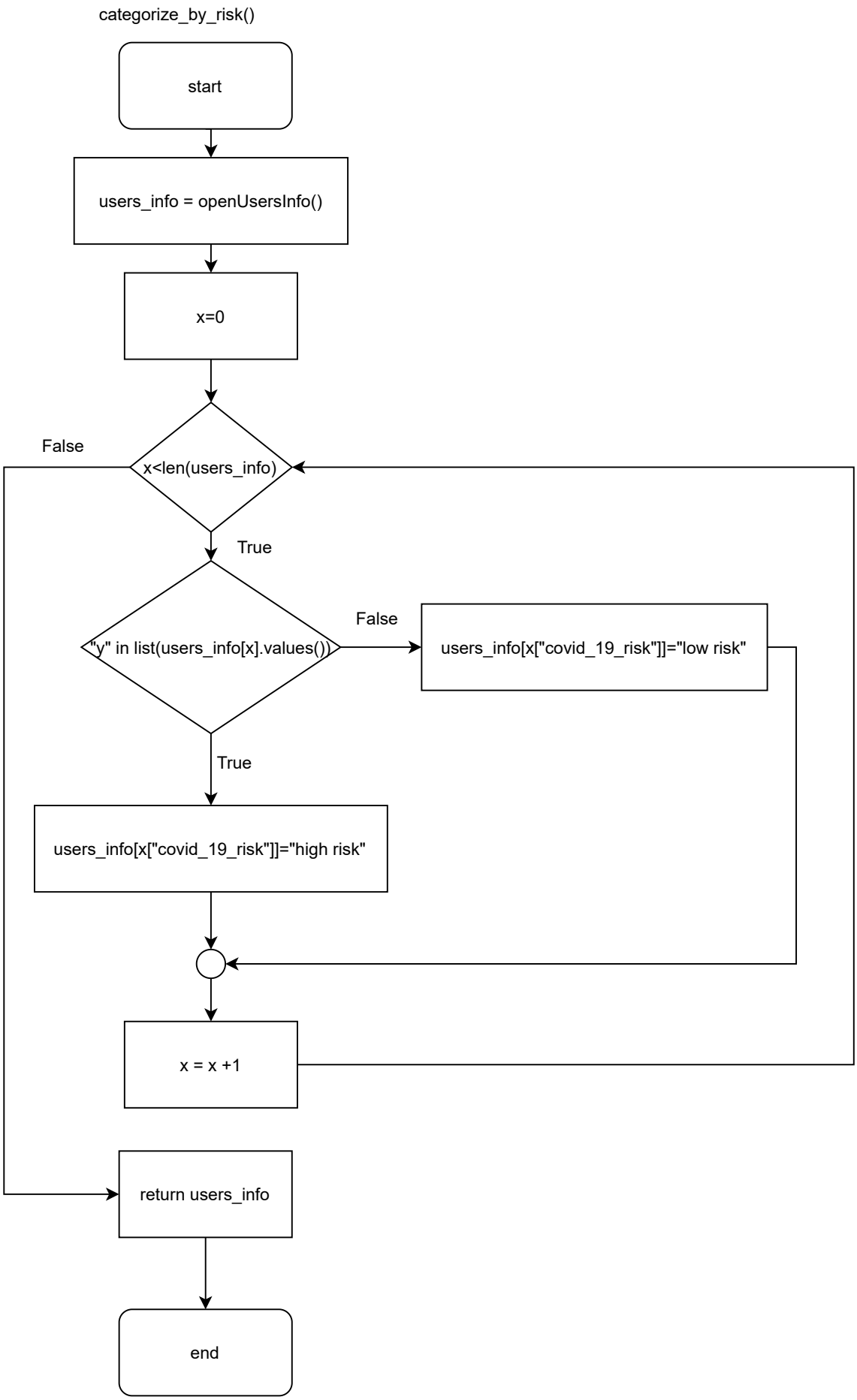

choice = 3?
True
False
center_data = read (vaccination_centre.json)
user_info = read (users_info.json)
i = 0
i< len(user_info)
True
user_login ==
user_info[i]["name"]
True
global userState
userState = user_info[i]["state"]
userState = userState.lower()
stateName = userState + "_appoinment"
assignAppt = False
r=1
False
r<len(center_data[stateName]
True
user_login ==
center_data[stateName
[r]["name"]
True
assignAppt = True
print(f'"

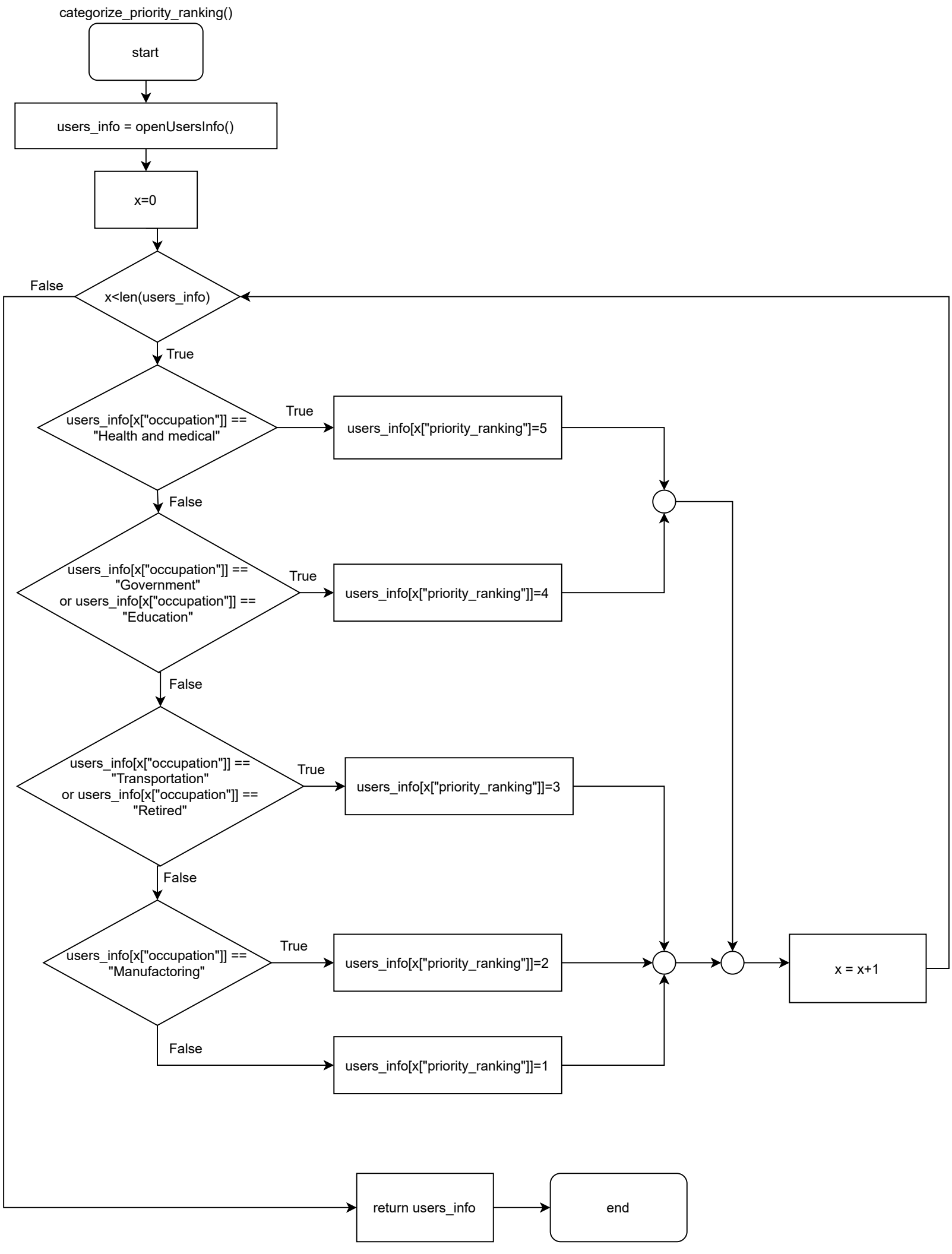

Location: {center_data[stateName][0]["center_name"]},
{center_data[stateName][0]["district"]}, {center_data[stateName][0]["state"]}
Date: {center_data[stateName][r]["date"]}
Time: {center_data[stateName][r]["time"]}
RSVP: {center_data[stateName][r]["rsvp"]}
"")
center_data[stateName]
[r]["rsvp"] == "n"
True
print("Would you like to RSVP for your appointment? (y/n)")
input rsvpConfirm
rsvpConfirm = rsvpConfirm.lower()
rsvpConfirm == "y"
True
center_data[stateName][r]
["rsvp"] = "y"
dump
center_data
to
appt_data
False
rsvpConfirm == "n"
True
center_data[stateName][r]
["rsvp"] = "n"
False
print("Not an appropriate choice.")
user_menu()
r = r+1
assignAppt == False
True
print
"You have not been assigned
an appointment yet."
choice = 4?
True
menu()
Input Enter

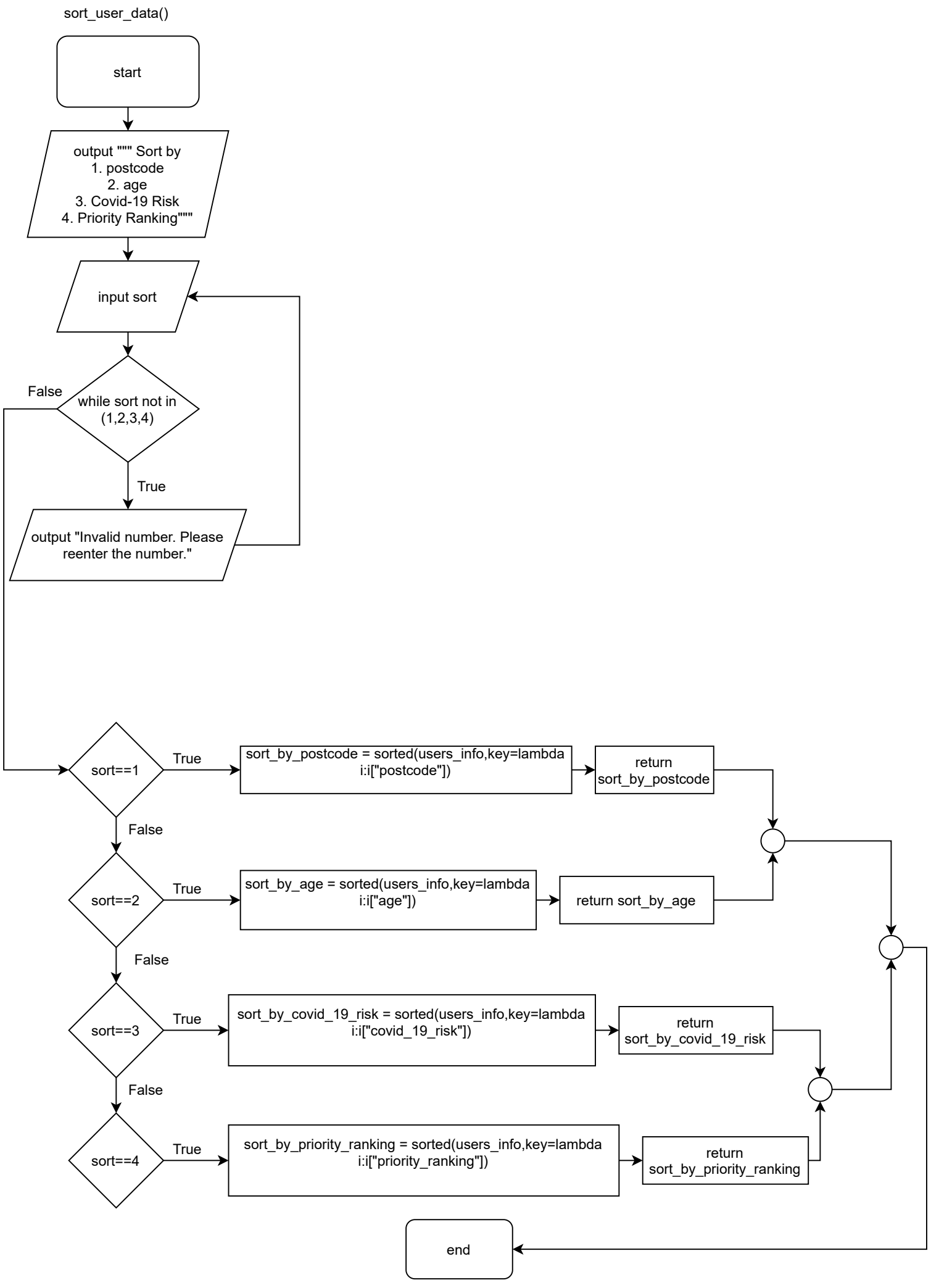

user_menu()
End

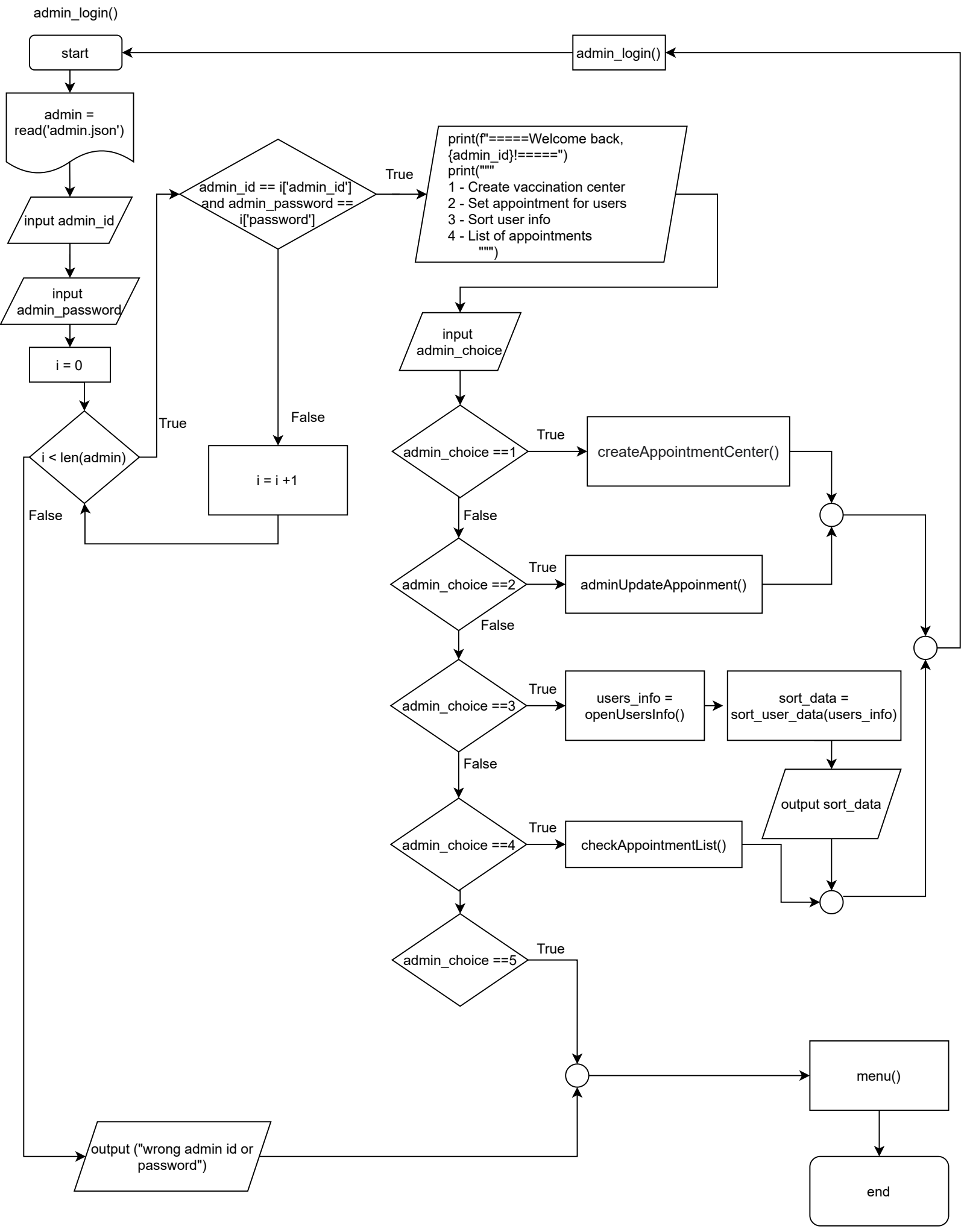

admin_menu()
start
print
"
1 - Create vaccination center or appoinment slot
2 - Set appointment for users
3 - Sort user info
4 - List of appointments
5 - Back to main menu
"
input admin_choice
admin_choice == 1
TRUE
FALSE
print
"
Please choose whether you
would like to:
1 - Create a vaccination center
2 - Create an appointment slot
"
input centerOrAppt
centerOrAppt == 1
TRUE
createVaccinationCenter()
FALSE
centerOrAppt == 2
TRUE
createVaccinationCenter()
FALSE
print
"Invalid input."
input("Press Enter Back To
Admin Menu...")
admin_menu()


admin_choice == 2
TRUE
print
"Please input the state of the
vaccination centre for the appointment
you would like to update."
input inputState
inputState.lower()
FALSE
apptUpdateState = inputState + "_appointment"
adminSetAppointment(apptUpdateState)
admin_choice == 3
TRUE
sort_user_data()
print_user_data()
FALSE
admin_choice == 4
TRUE
stateAppointmentList()
FALSE
admin_choice == 5
TRUE
menu()
FALSE
print "Invalid input."
admin_menu()
end

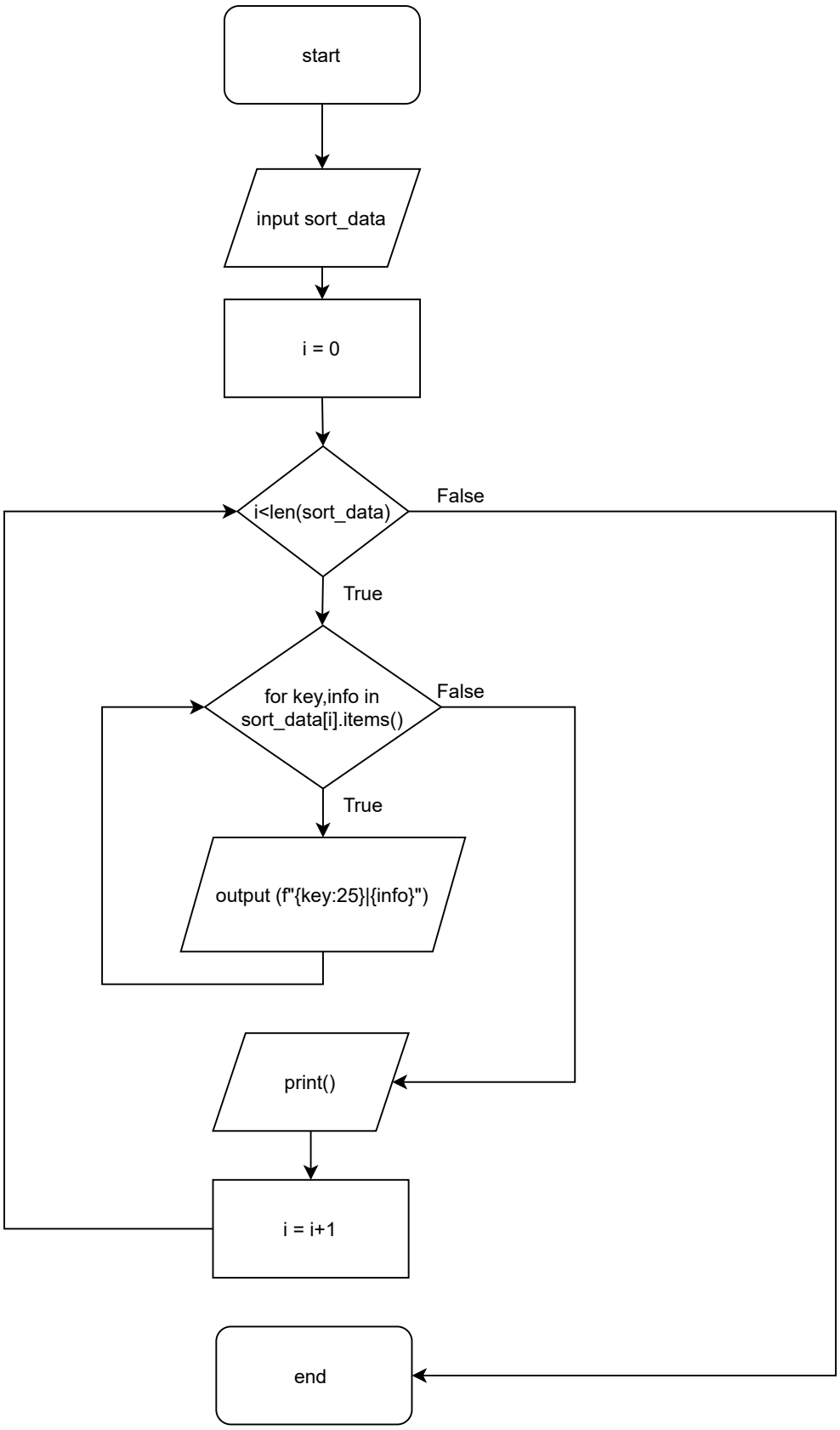

categorize_by_risk()
start
users_info = openUsersInfo()
x=0
False
x<len(users_info)
True
"y" in list(users_info[x].values())
False
users_info[x["covid_19_risk"]]="low risk"
True
users_info[x["covid_19_risk"]]="high risk"
x = x +1
return users_info
end

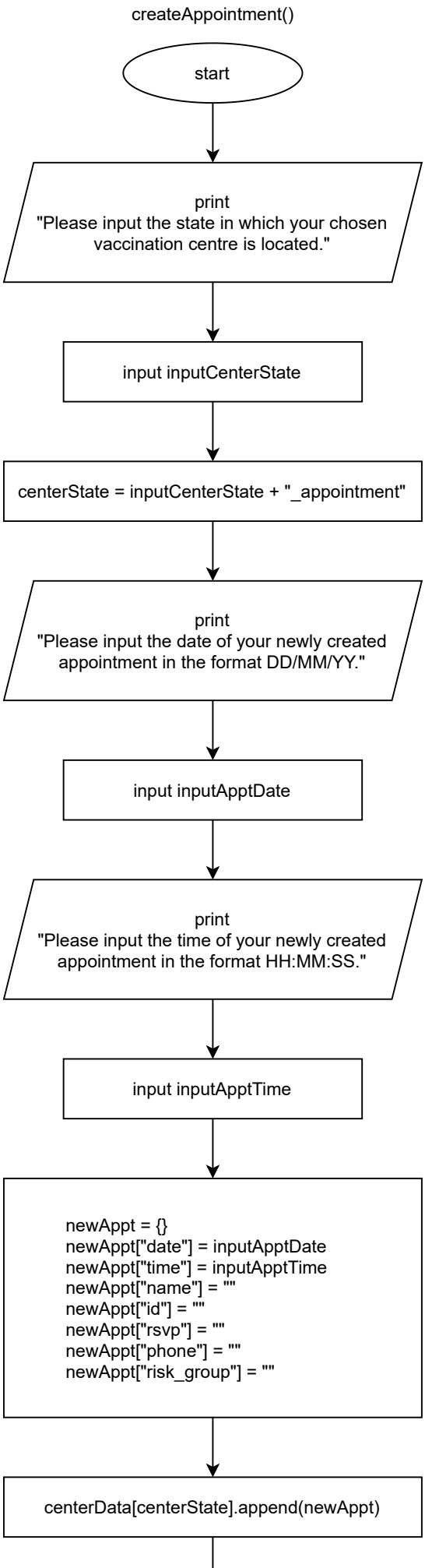

categorize_priority_ranking()
start
users_info = openUsersInfo()
x=0
x<len(users_info)
False
True
users_info[x["occupation"]] == "Health and medical"
True
users_info[x["priority_ranking"]=5
False
users_info[x["occupation"]] == "Government" or users_info[x["occupation"]] == "Education"
True
users_info[x["priority_ranking"]]=4
False
users_info[x["occupation"]] == "Transportation" or users_info[x["occupation"]] == "Retired"
True
users_info[x["priority_ranking"]]=3
False
users_info[x["occupation"]] == "Manufactoring"
True
users_info[x["priority_ranking"]]=2
False
users_info[x["priority_ranking"]]=1
x = x+1
return users_info
end

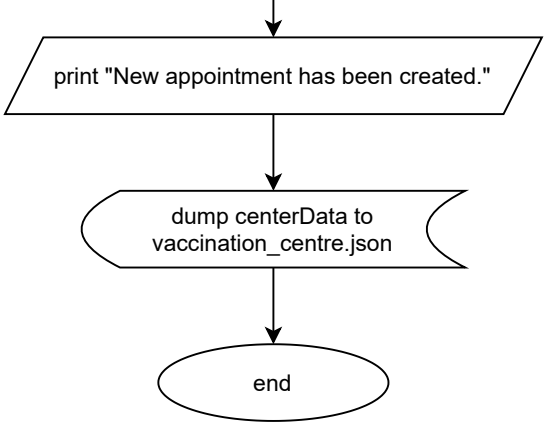

sort_user_data()
start
output """ Sort by
1. postcode
2. age
3. Covid-19 Risk
4. Priority Ranking"""
input sort
while sort not in (1,2,3,4)
False
True
output "Invalid number. Please reenter the number."
sort==1
True
sort_by_postcode = sorted(users_info,key=lambda i:i["postcode"])
return sort_by_postcode
False
sort==2
True
sort_by_age = sorted(users_info,key=lambda i:i["age"])
return sort_by_age
False
sort==3
True
sort_by_covid_19_risk = sorted(users_info,key=lambda i:i["covid_19_risk"])
return sort_by_covid_19_risk
False
sort==4
True
sort_by_priority_ranking = sorted(users_info,key=lambda i:i["priority_ranking"])
return sort_by_priority_ranking
end

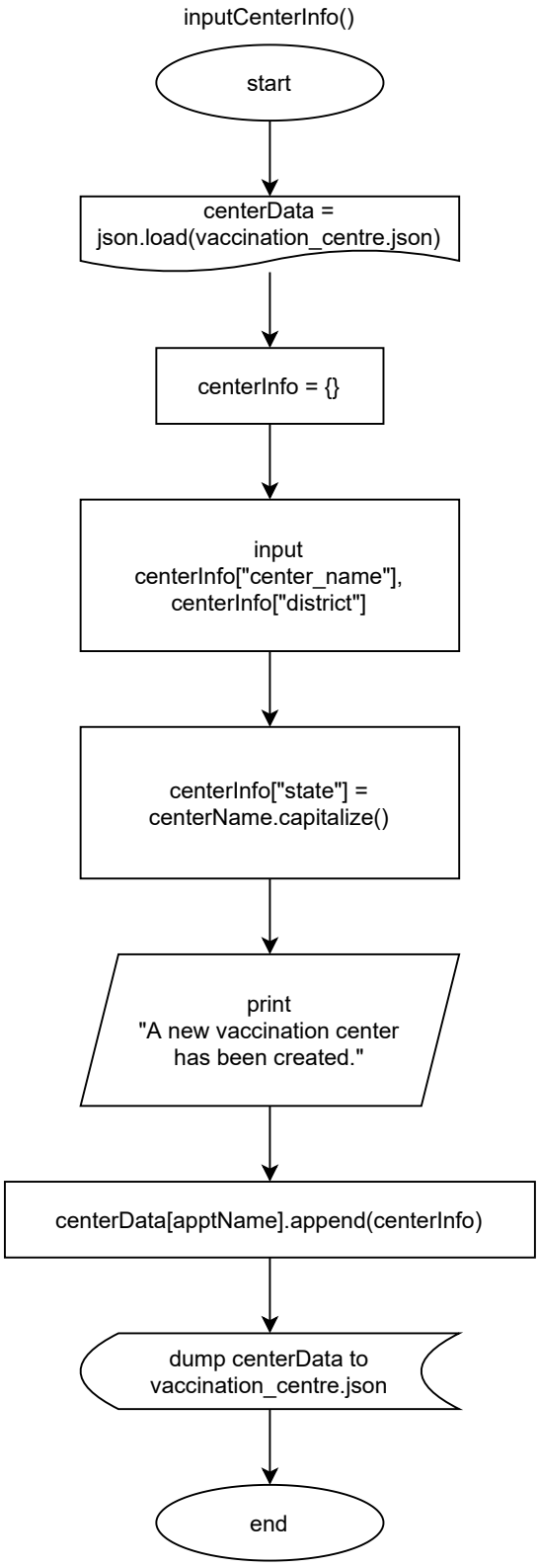

admin_login()
start
admin_login()
admin = read('admin.json')
input admin_id
input admin_password
i = 0
i < len(admin)
True
False
admin_id == i['admin_id'] and admin_password == i['password']
True
False
i = i +1
print(f"=====Welcome back, {admin_id}!=====")
print("""
1 - Create vaccination center
2 - Set appointment for users
3 - Sort user info
4 - List of appointments
""")
input admin_choice
admin_choice ==1
True
createAppointmentCenter()
False
admin_choice ==2
True
adminUpdateAppoinment()
False
admin_choice ==3
True
users_info = openUsersInfo()
sort_data = sort_user_data(users_info)
output sort_data
False
admin_choice ==4
True
checkAppointmentList()
admin_choice ==5
True
output ("wrong admin id or password")
menu()
end

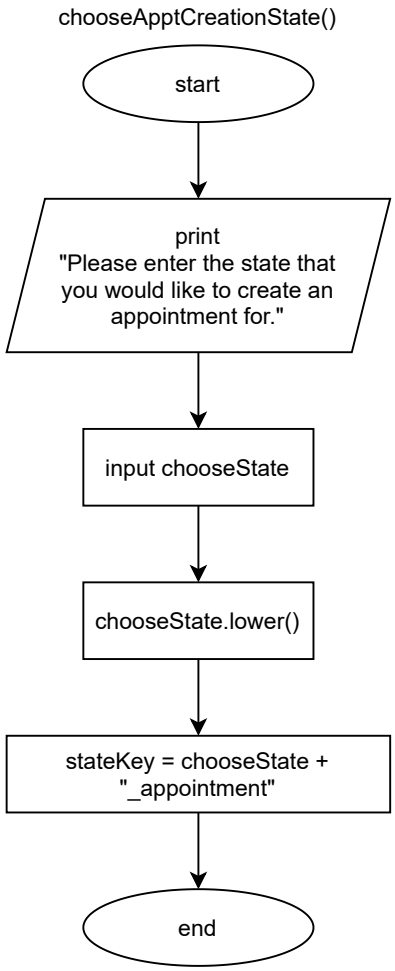
print_user_data()

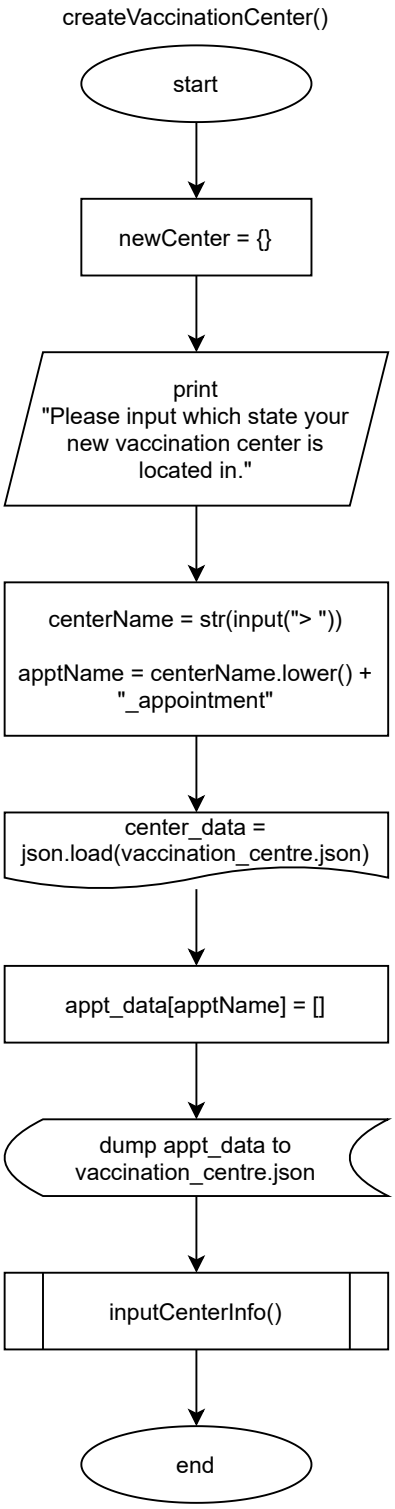


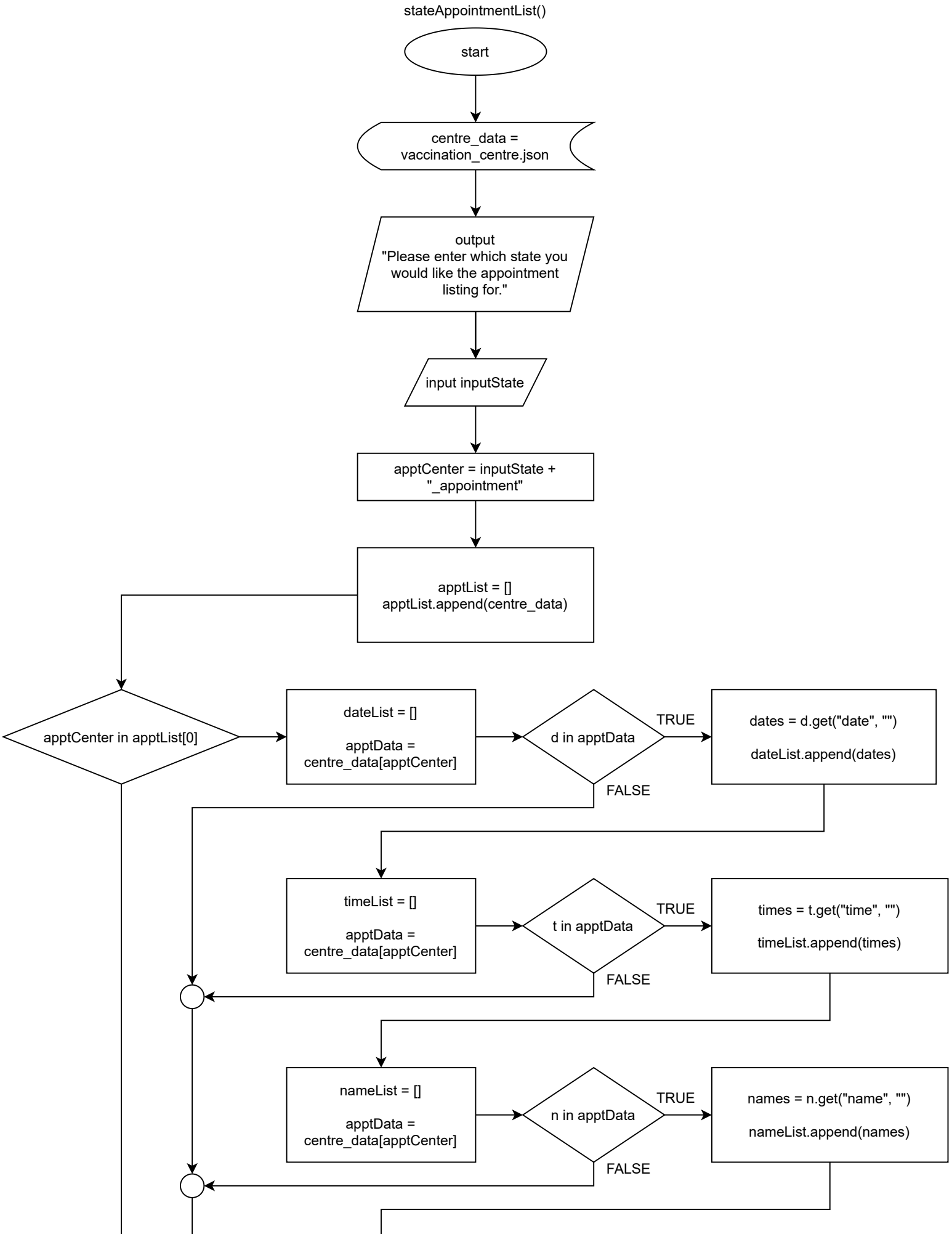

createAppointment()
start
print
"Please input the state in which your chosen vaccination centre is located."
input inputCenterState
centerState = inputCenterState + "_appointment"
print
"Please input the date of your newly created appointment in the format DD/MM/YY."
input inputApptDate
print
"Please input the time of your newly created appointment in the format HH:MM:SS."
input inputApptTime
newAppt = {}
newAppt["date"] = inputApptDate
newAppt["time"] = inputApptTime
newAppt["name"] = ""
newAppt["id"] = ""
newAppt["rsvp"] = ""
newAppt["phone"] = ""
newAppt["risk_group"] = ""
centerData[centerState].append(newAppt)

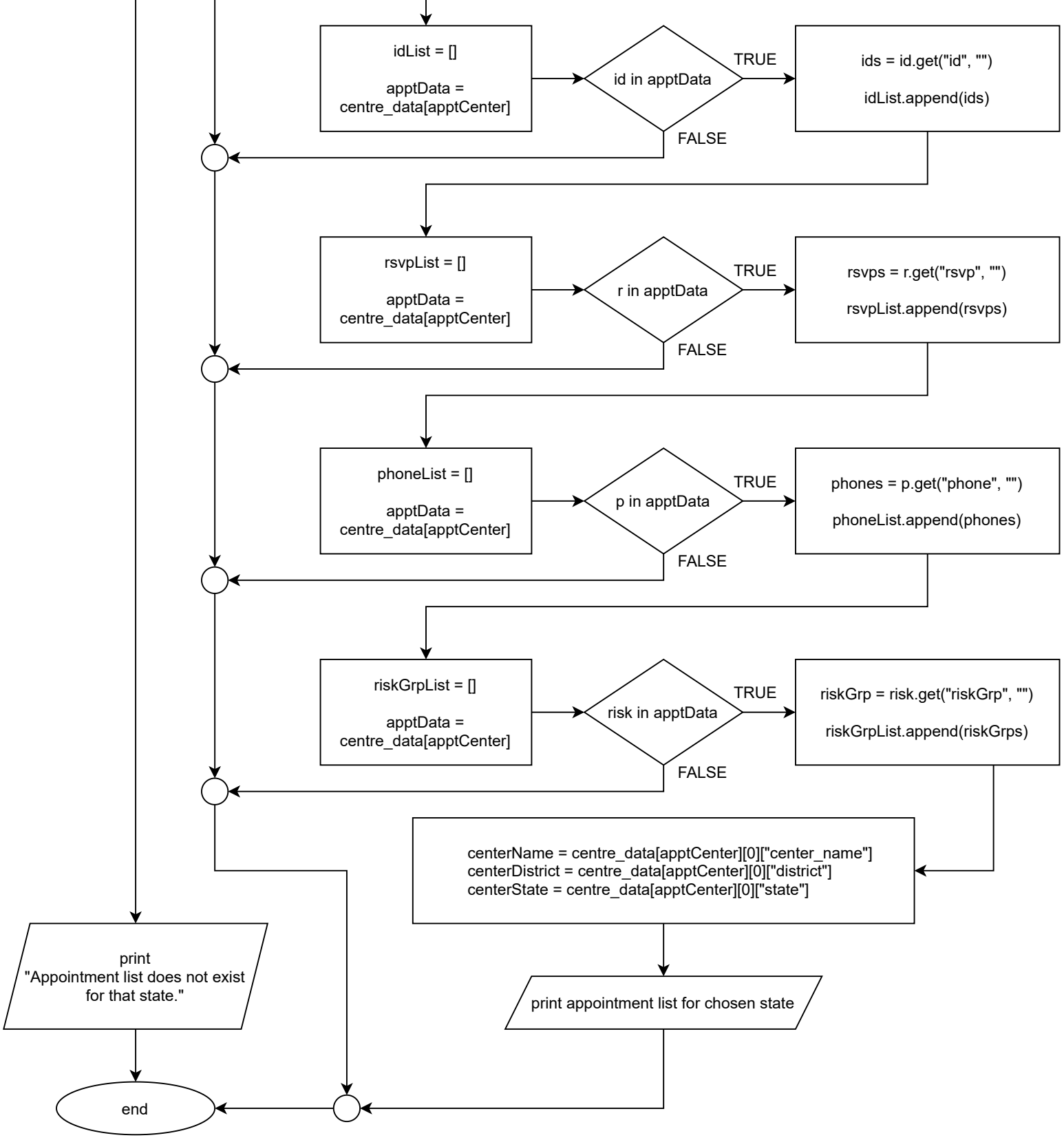

print "New appointment has been created."
dump centerData to
vaccination_centre.json
end

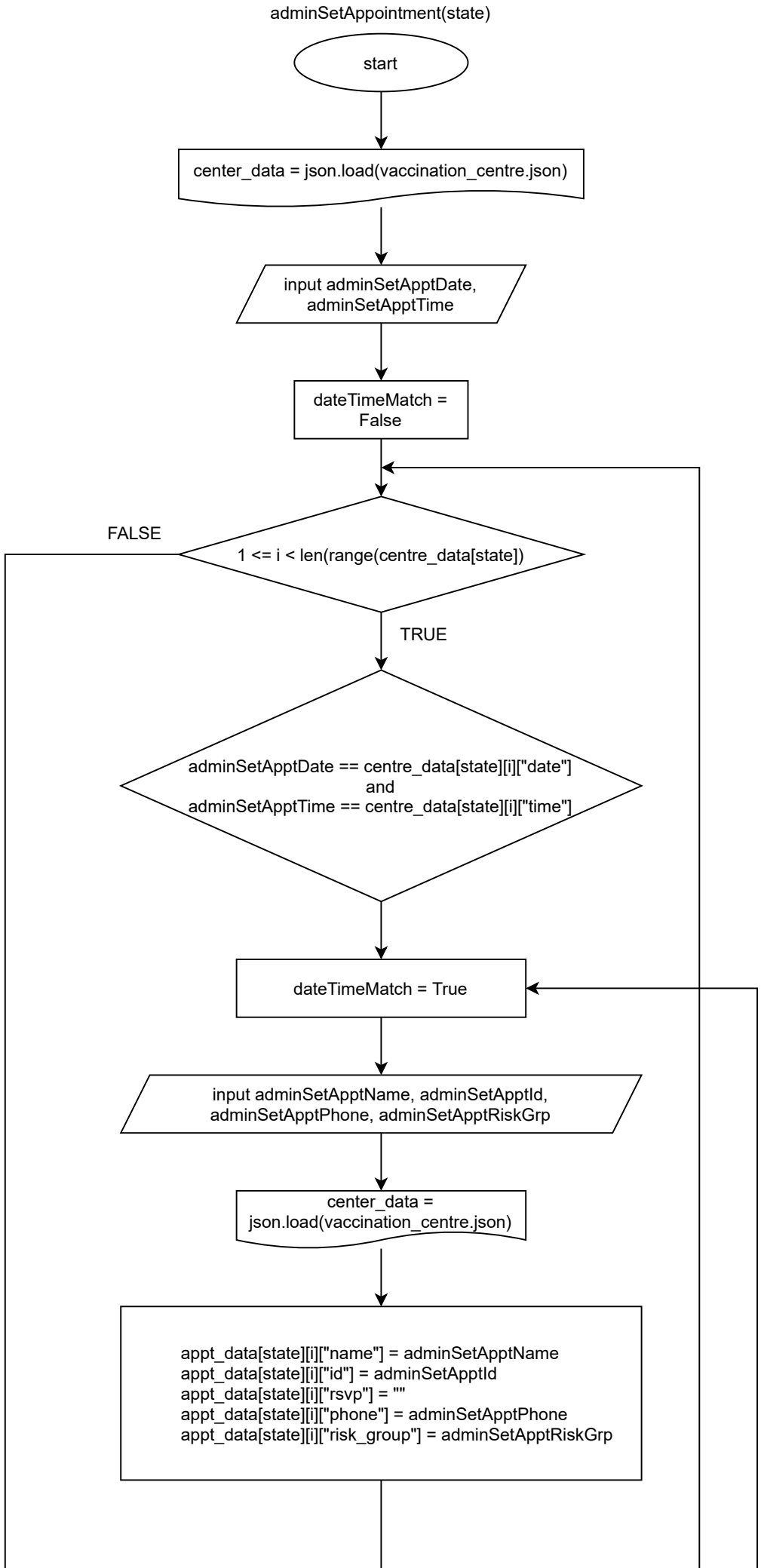

inputCenterInfo()
start
centerData =
json.load(vaccination_centre.json)
centerInfo = {}
input
centerInfo["center_name"],
centerInfo["district"]
centerInfo["state"] =
centerName.capitalize()
print
"A new vaccination center
has been created."
centerData[apptName].append(centerInfo)
dump centerData to
vaccination_centre.json
end

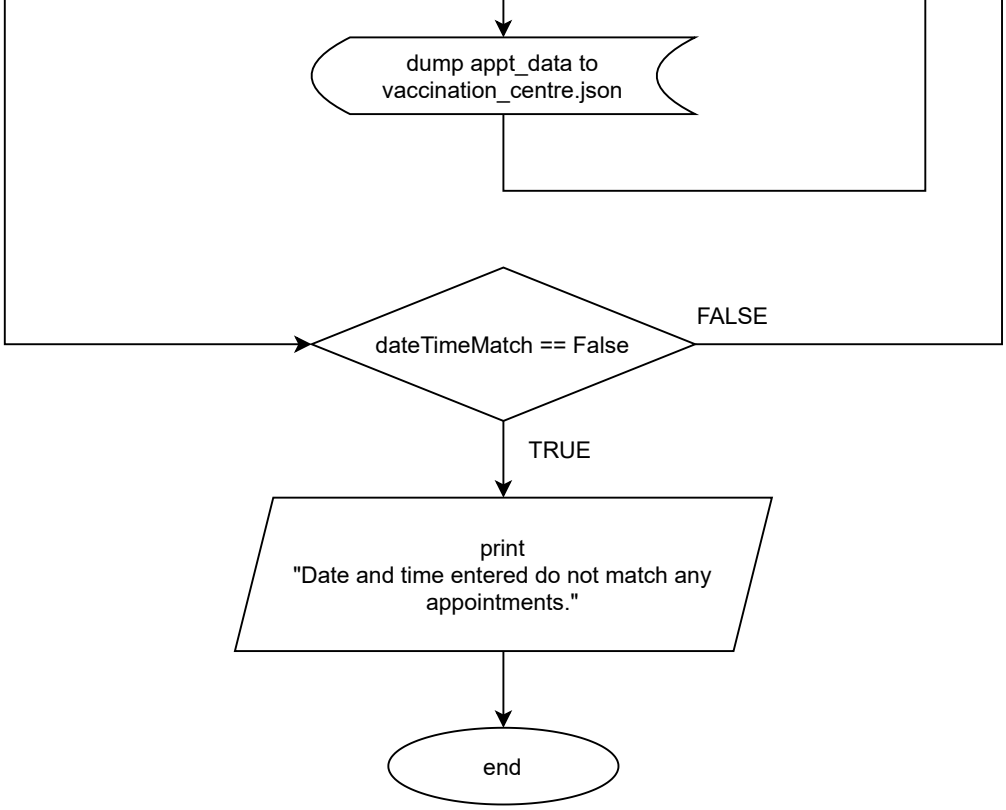

chooseApptCreationState()
start
print
"Please enter the state that you would like to create an appointment for."
input chooseState
chooseState.lower()
stateKey = chooseState + "_appointment"
end


createVaccinationCenter()
start
newCenter = {}
print
"Please input which state your new vaccination center is located in."
centerName = str(input("> "))
apptName = centerName.lower() + "_appointment"
center_data = json.load(vaccination_centre.json)
appt_data[apptName] = []
dump appt_data to vaccination_centre.json
inputCenterInfo()
end


stateAppointmentList()
start
centre_data = vaccination_centre.json
output "Please enter which state you would like the appointment listing for."
input inputState
apptCenter = inputState + "_appointment"
apptList = []
apptList.append(centre_data)
apptCenter in apptList[0]
dateList = []
apptData = centre_data[apptCenter]
d in apptData
TRUE
dates = d.get("date", "")
dateList.append(dates)
FALSE
timeList = []
apptData = centre_data[apptCenter]
t in apptData
TRUE
times = t.get("time", "")
timeList.append(times)
FALSE
nameList = []
apptData = centre_data[apptCenter]
n in apptData
TRUE
names = n.get("name", "")
nameList.append(names)
FALSE


idList = []
apptData = centre_data[apptCenter]
id in apptData
TRUE
ids = id.get("id", "")
idList.append(ids)
FALSE
rsvpList = []
apptData = centre_data[apptCenter]
r in apptData
TRUE
rsvps = r.get("rsvp", "")
rsvpList.append(rsvps)
FALSE
phoneList = []
apptData = centre_data[apptCenter]
p in apptData
TRUE
phones = p.get("phone", "")
phoneList.append(phones)
FALSE
riskGrpList = []
apptData = centre_data[apptCenter]
risk in apptData
TRUE
riskGrp = risk.get("riskGrp", "")
riskGrpList.append(riskGrps)
FALSE
centerName = centre_data[apptCenter][0]["center_name"]
centerDistrict = centre_data[apptCenter][0]["district"]
centerState = centre_data[apptCenter][0]["state"]
print appointment list for chosen state
print
"Appointment list does not exist
for that state."
end


adminSetAppointment(state)
start
center_data = json.load(vaccination_centre.json)
input adminSetApptDate,
adminSetApptTime
dateTimeMatch =
False
FALSE
1 <= i < len(range(centre_data[state])
TRUE
adminSetApptDate == centre_data[state][i]["date"]
and
adminSetApptTime == centre_data[state][i]["time"]
dateTimeMatch = True
input adminSetApptName, adminSetApptId,
adminSetApptPhone, adminSetApptRiskGrp
center_data =
json.load(vaccination_centre.json)
appt_data[state][i]["name"] = adminSetApptName
appt_data[state][i]["id"] = adminSetApptId
appt_data[state][i]["rsvp"] = ""
appt_data[state][i]["phone"] = adminSetApptPhone
appt_data[state][i]["risk_group"] = adminSetApptRiskGrp


dump appt_data to
vaccination_centre.json
dateTimeMatch == False
FALSE
TRUE
print
"Date and time entered do not match any
appointments."
end