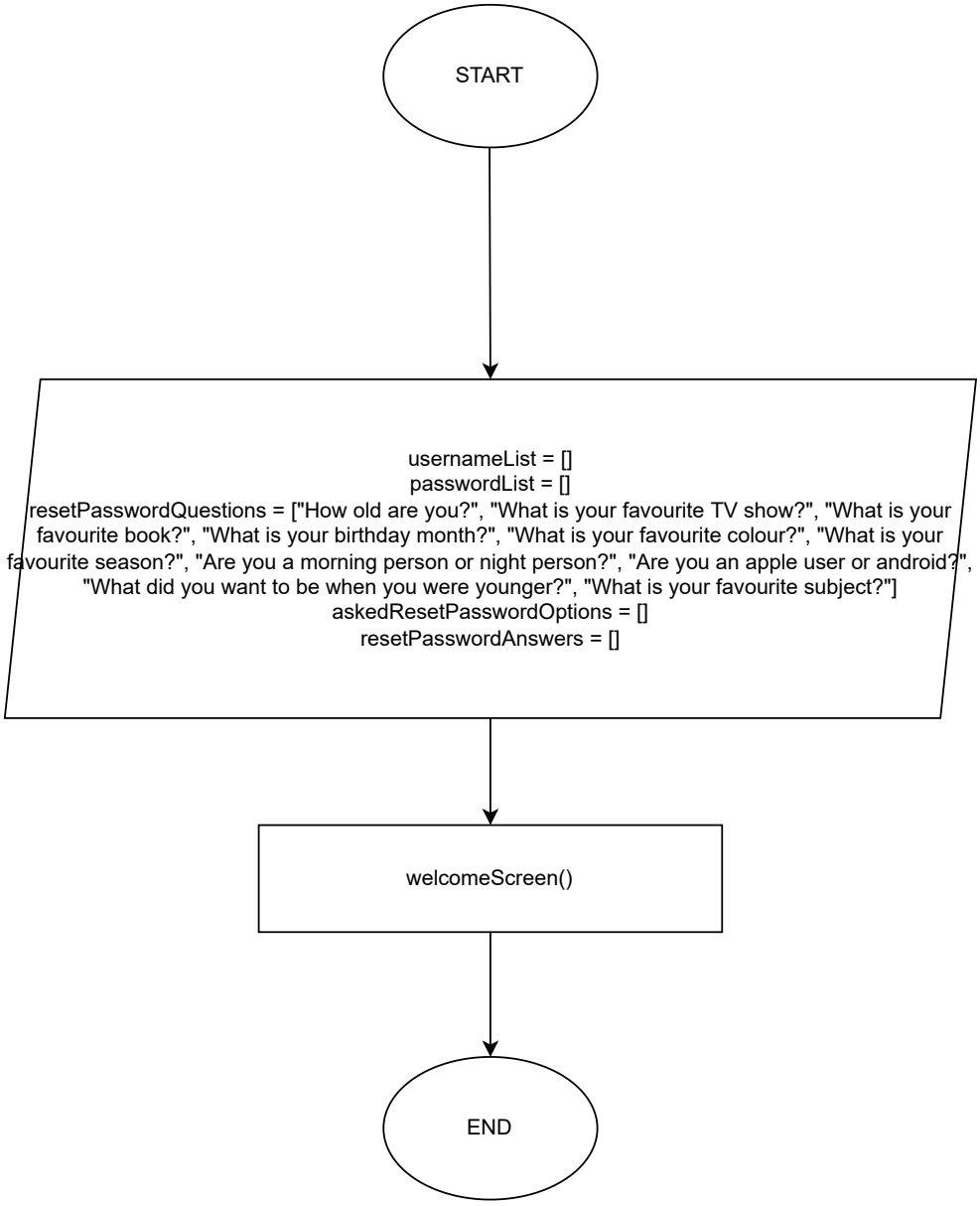
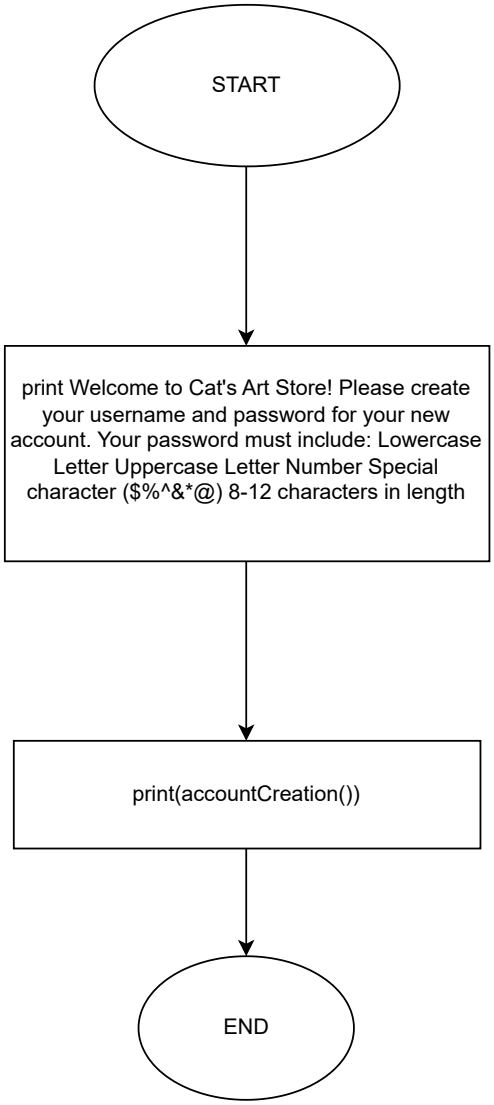
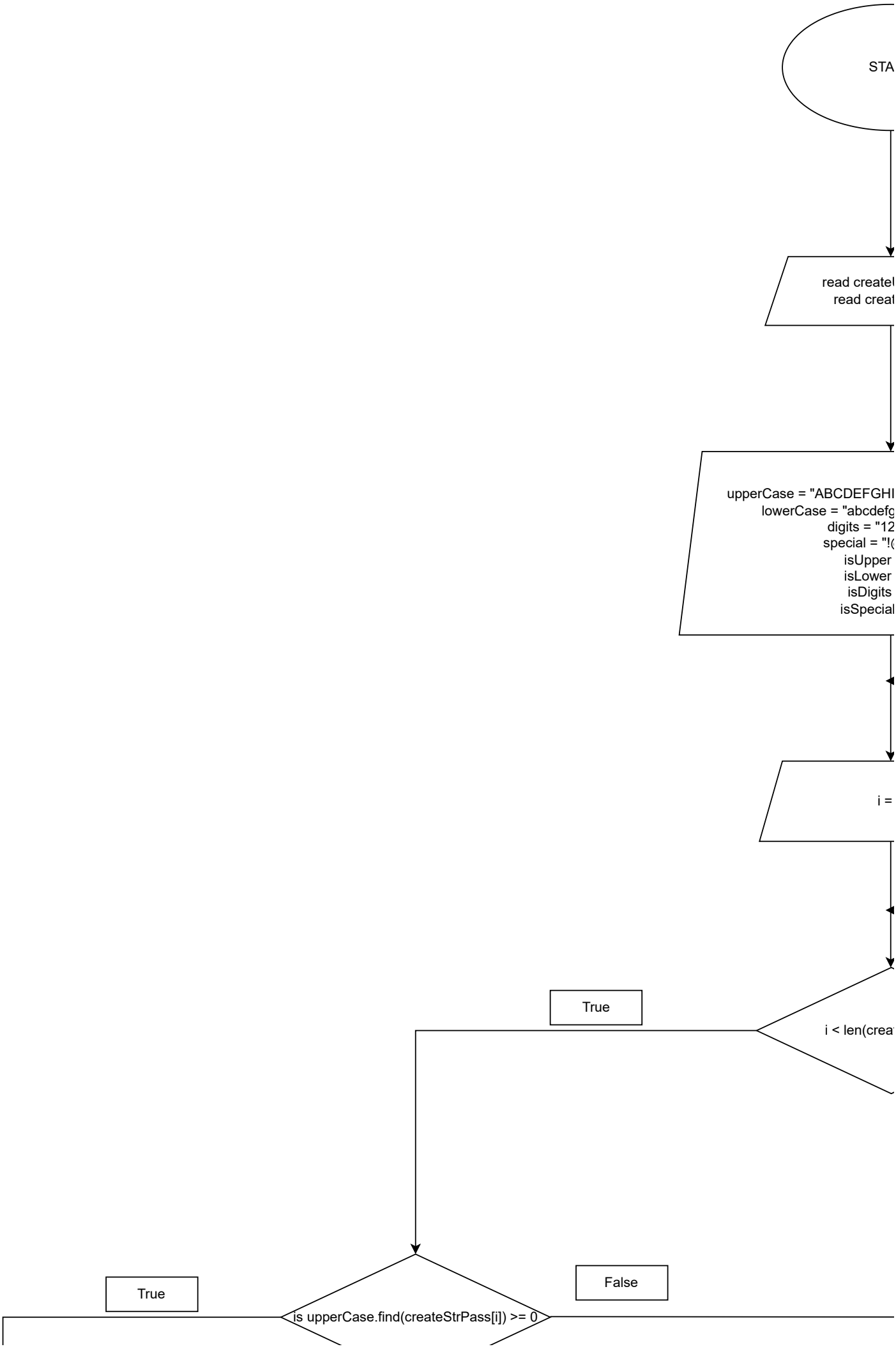
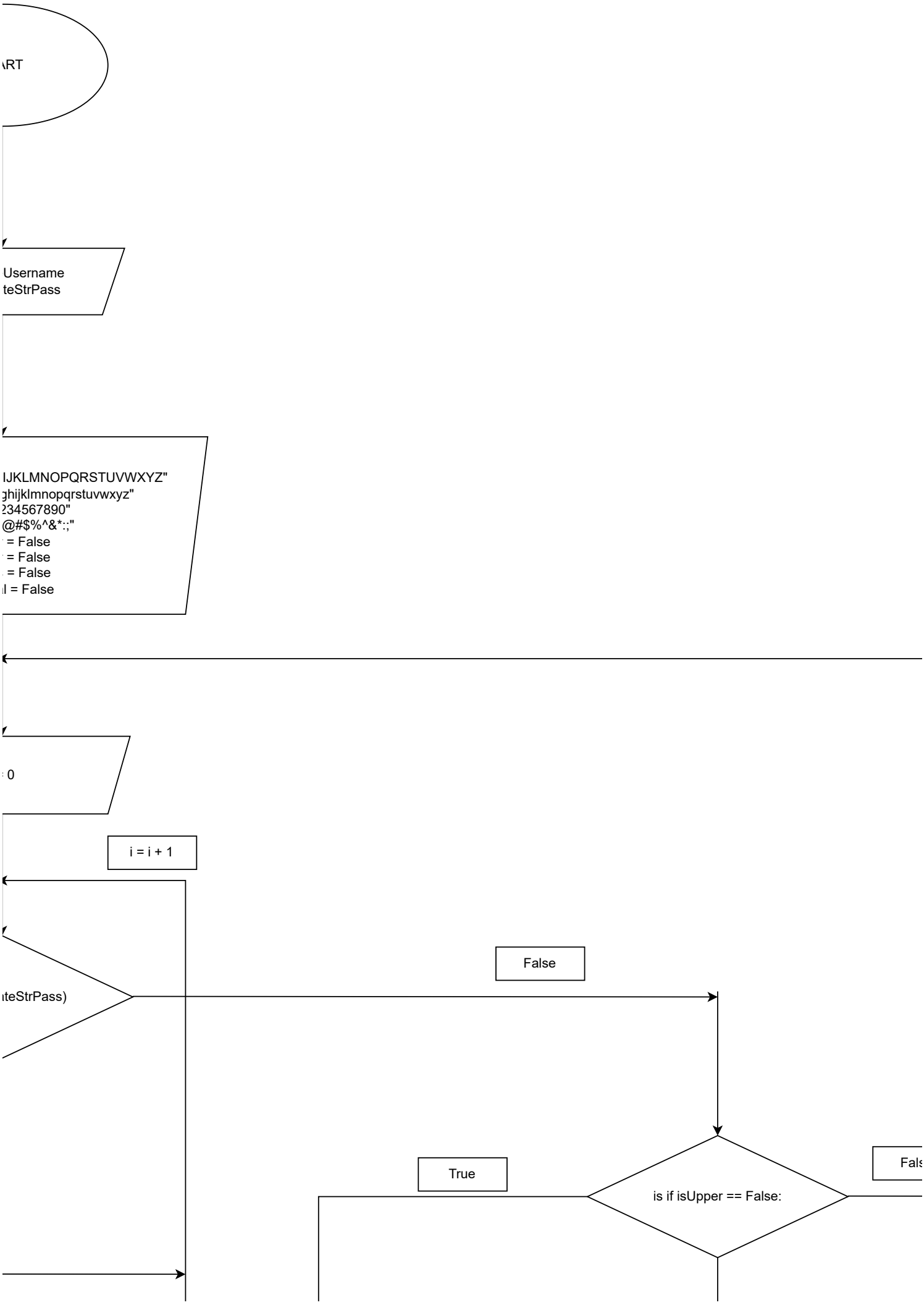
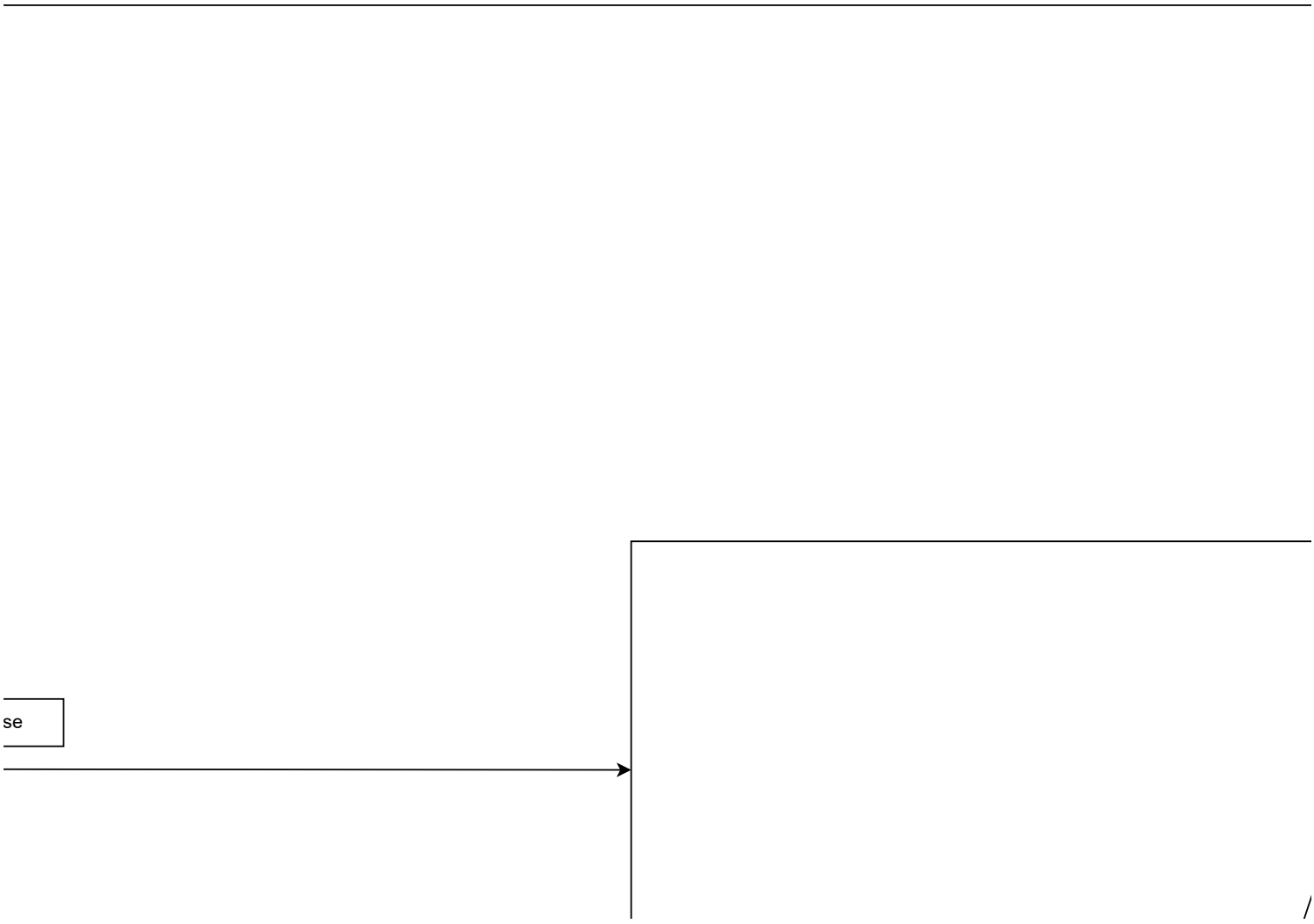
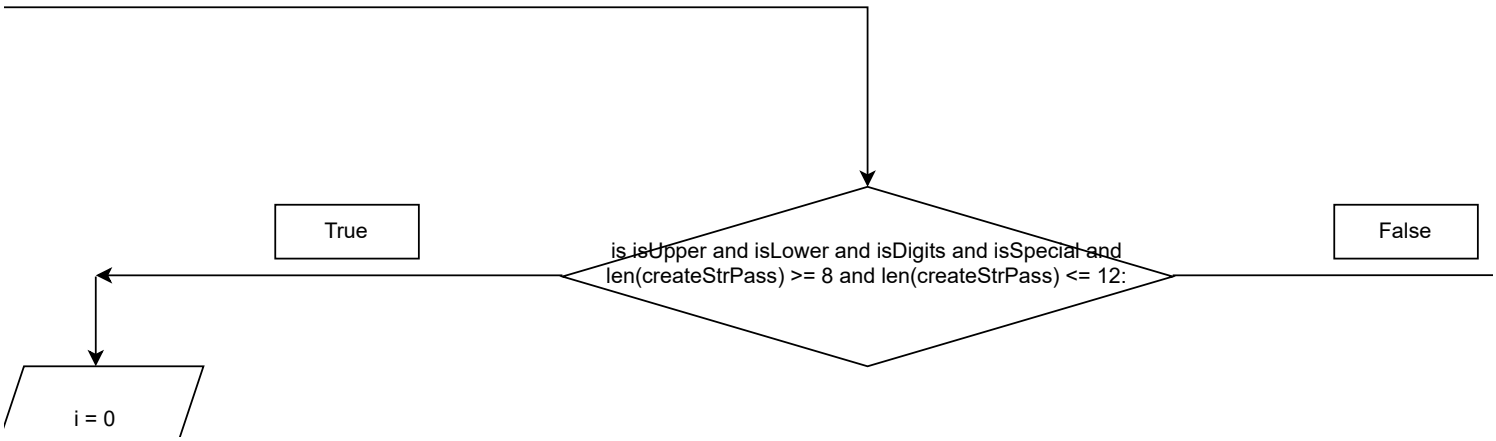

START
usernameList = []
passwordList = []
resetPasswordQuestions = ["How old are you?", "What is your favourite TV show?", "What is your favourite book?", "What is your birthday month?", "What is your favourite colour?", "What is your favourite season?", "Are you a morning person or night person?", "Are you an apple user or android?", "What did you want to be when you were younger?", "What is your favourite subject?"]
askedResetPasswordOptions = []
resetPasswordAnswers = []
welcomeScreen()
END

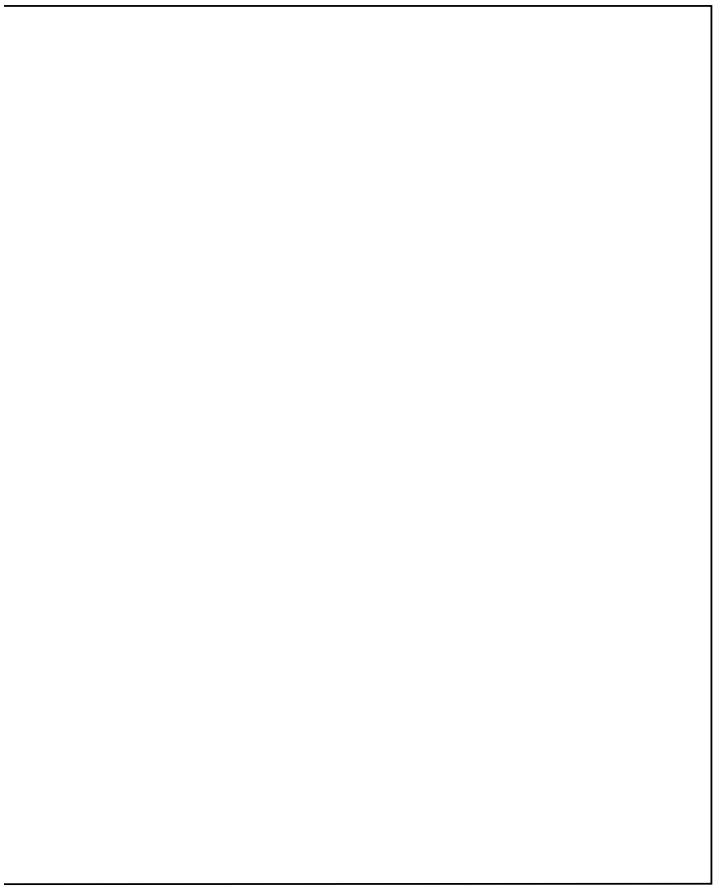

START
print Welcome to Cat's Art Store! Please create your username and password for your new account. Your password must include: Lowercase Letter Uppercase Letter Number Special character ($%^&*@) 8-12 characters in length
print(accountCreation())
END

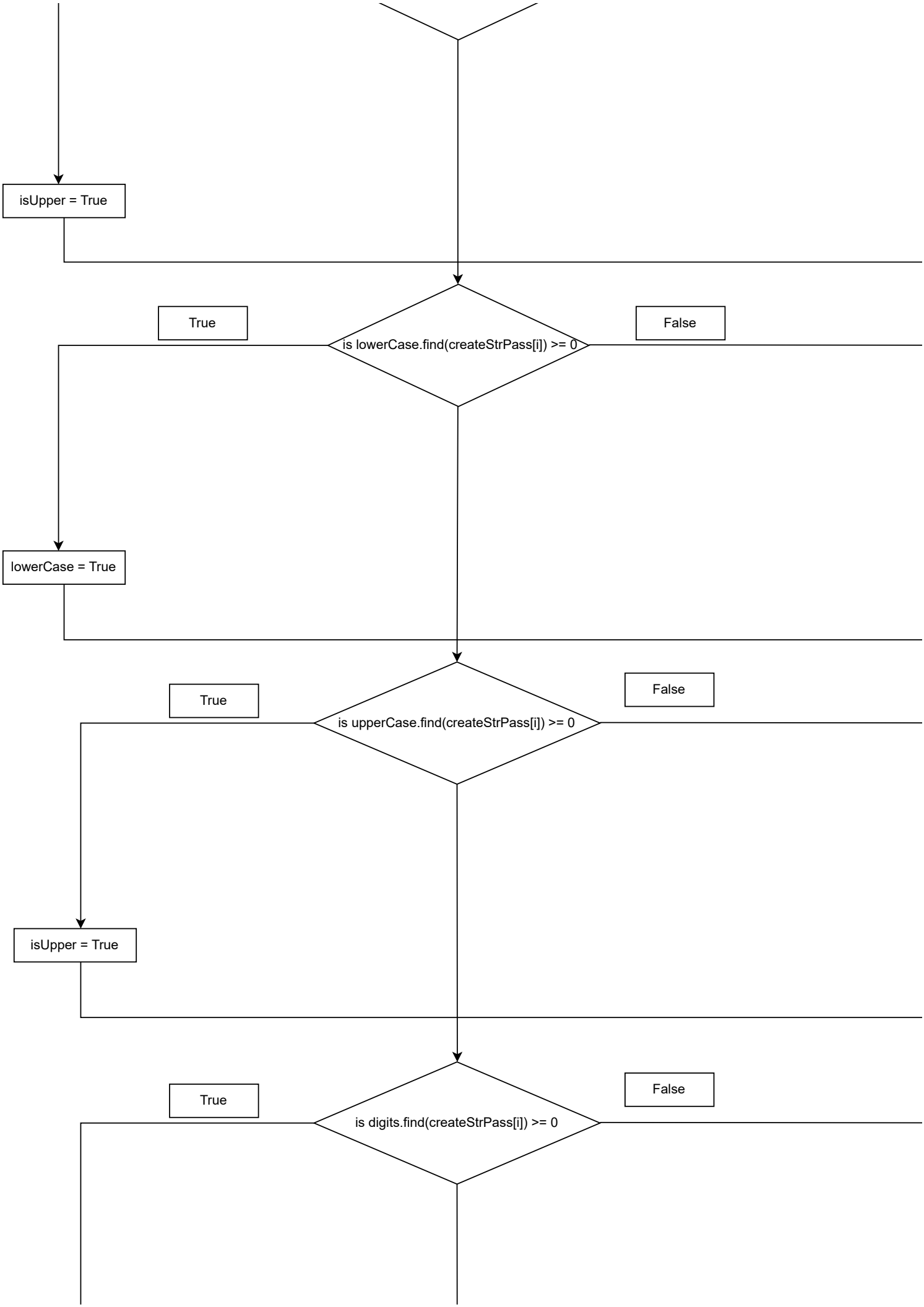

STA
read createl
read creat
upperCase = "ABCDEFGHI
lowerCase = "abcdefg
digits = "12
special = "!(
isUpper
isLower
isDigits
isSpecial
i =
i < len(crea
True
is upperCase.find(createStrPass[i]) >= 0
True
False

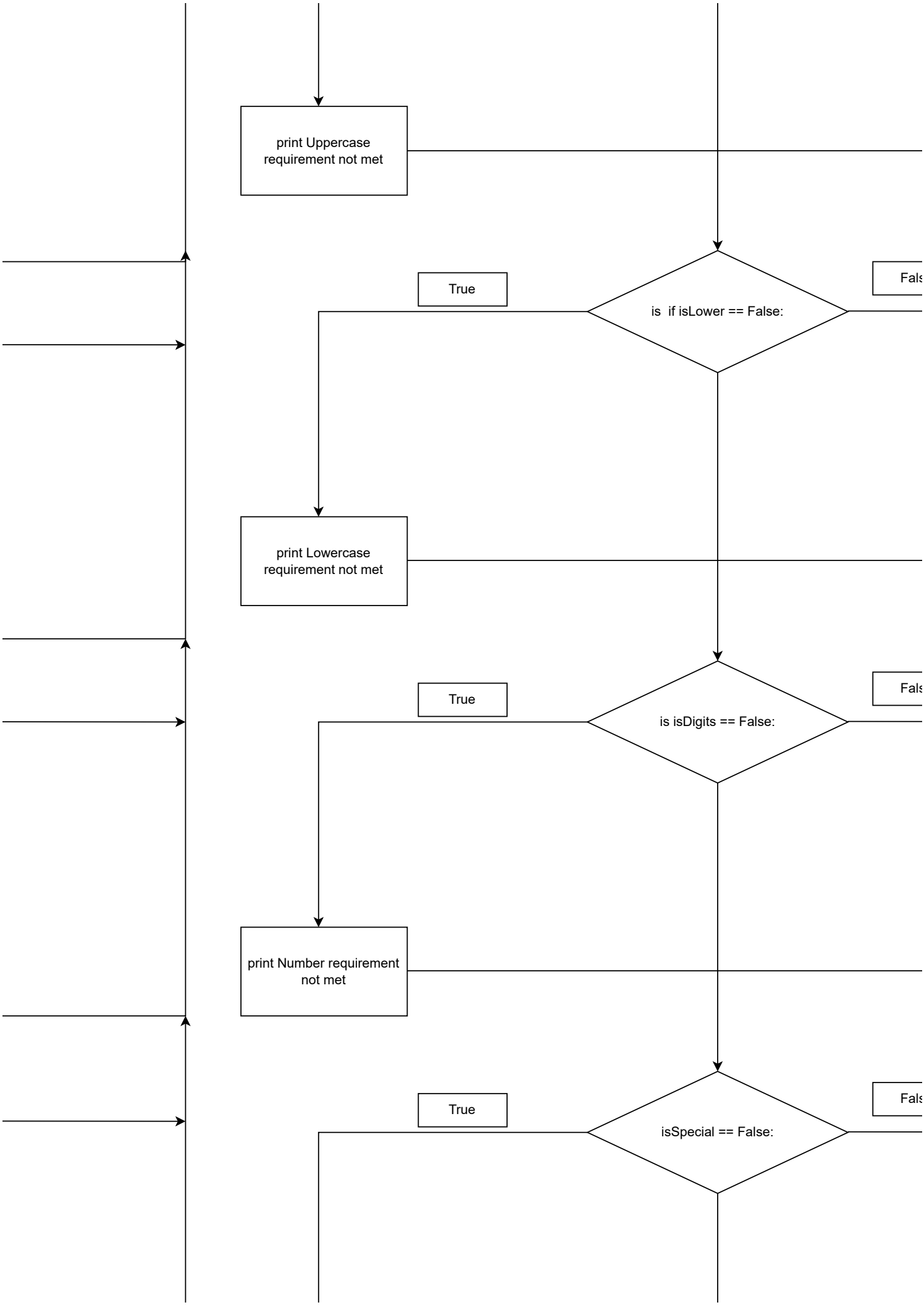

ART
Username
teStrPass
IJKLMNOPQRSTUVWXYZ"
ghijklmnopqrstuvwxyz"
234567890"
@#$%^&*:;"
= False
= False
= False
l = False
0
i = i + 1
teStrPass)
False
True
is if isUpper == False:
Fals

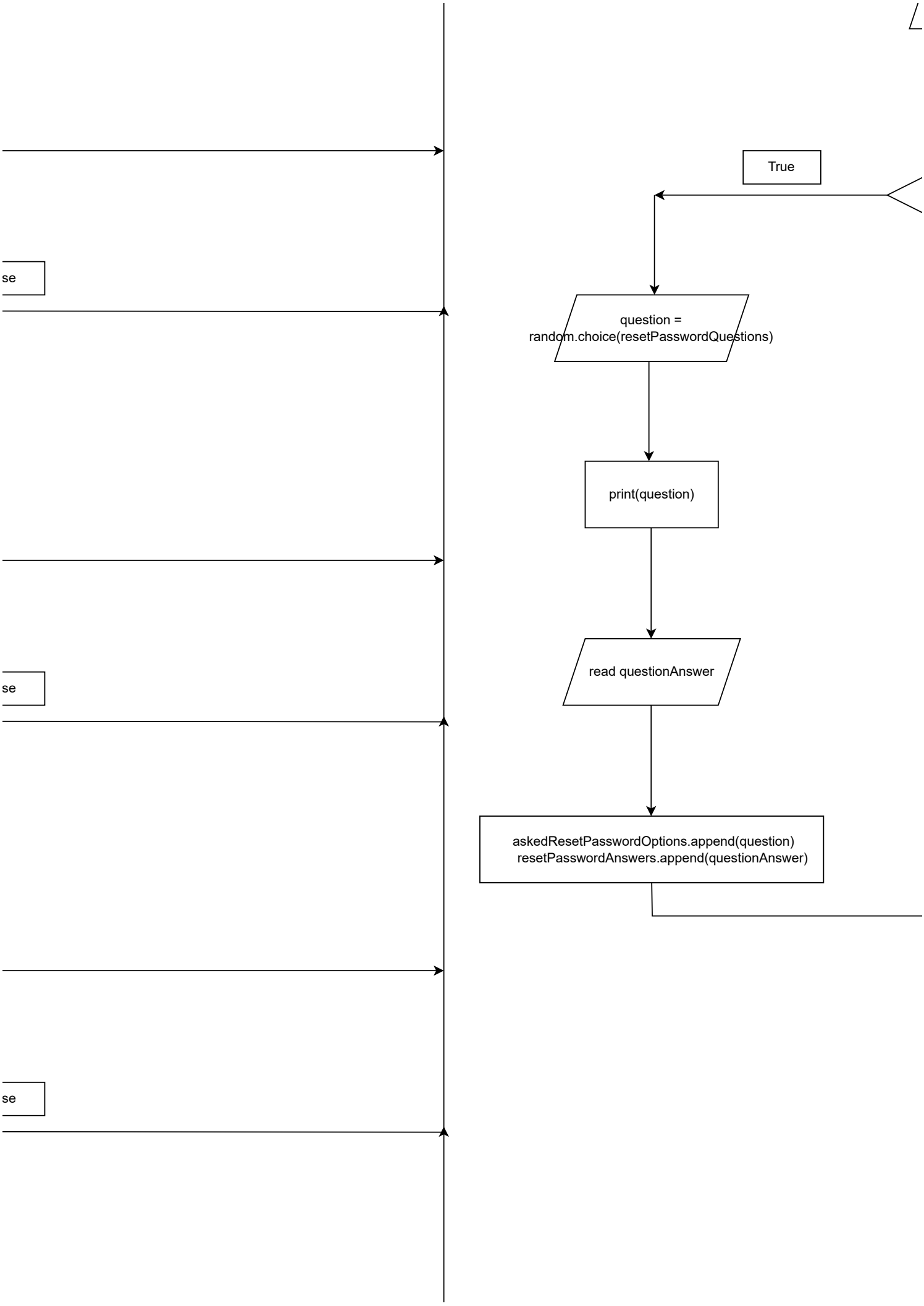

se

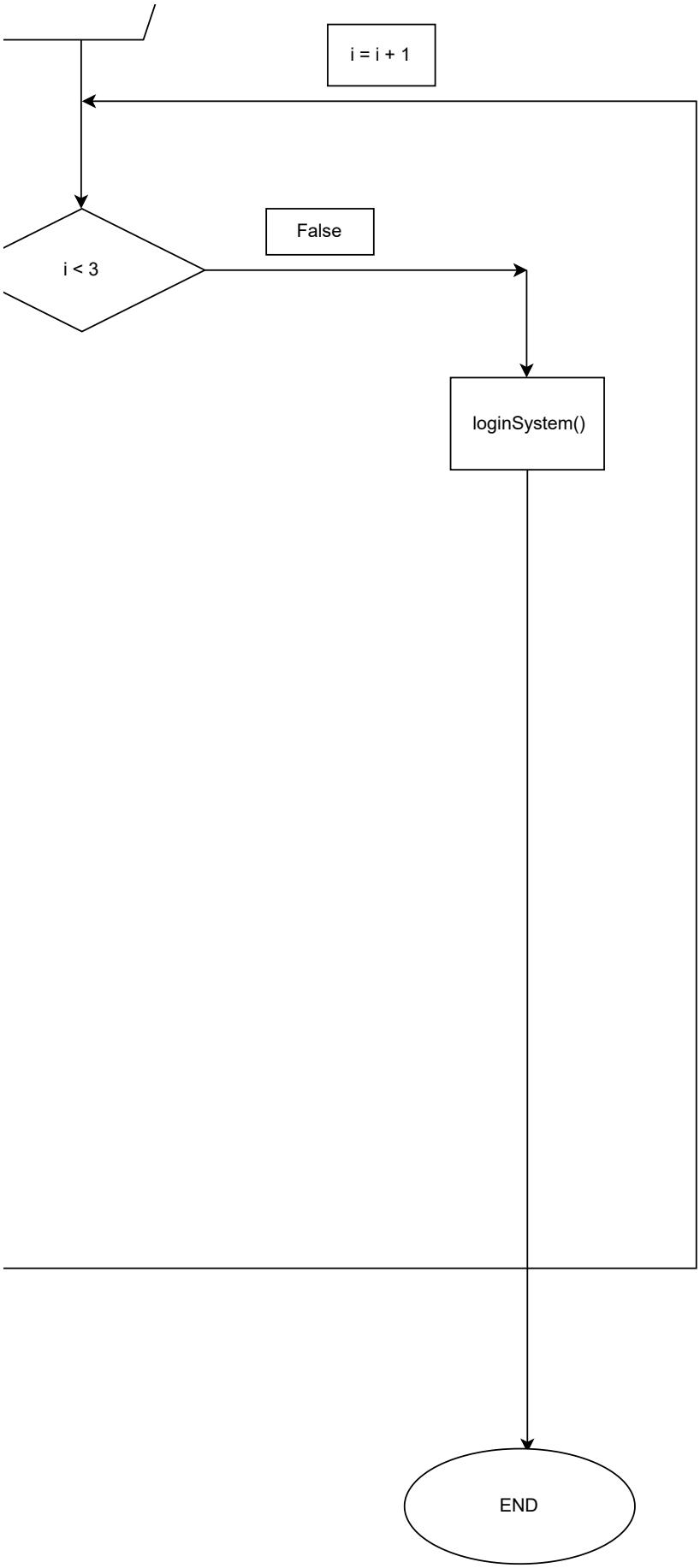

True
is isUpper and isLower and isDigits and isSpecial and
len(createStrPass) >= 8 and len(createStrPass) <= 12:
False
i = 0

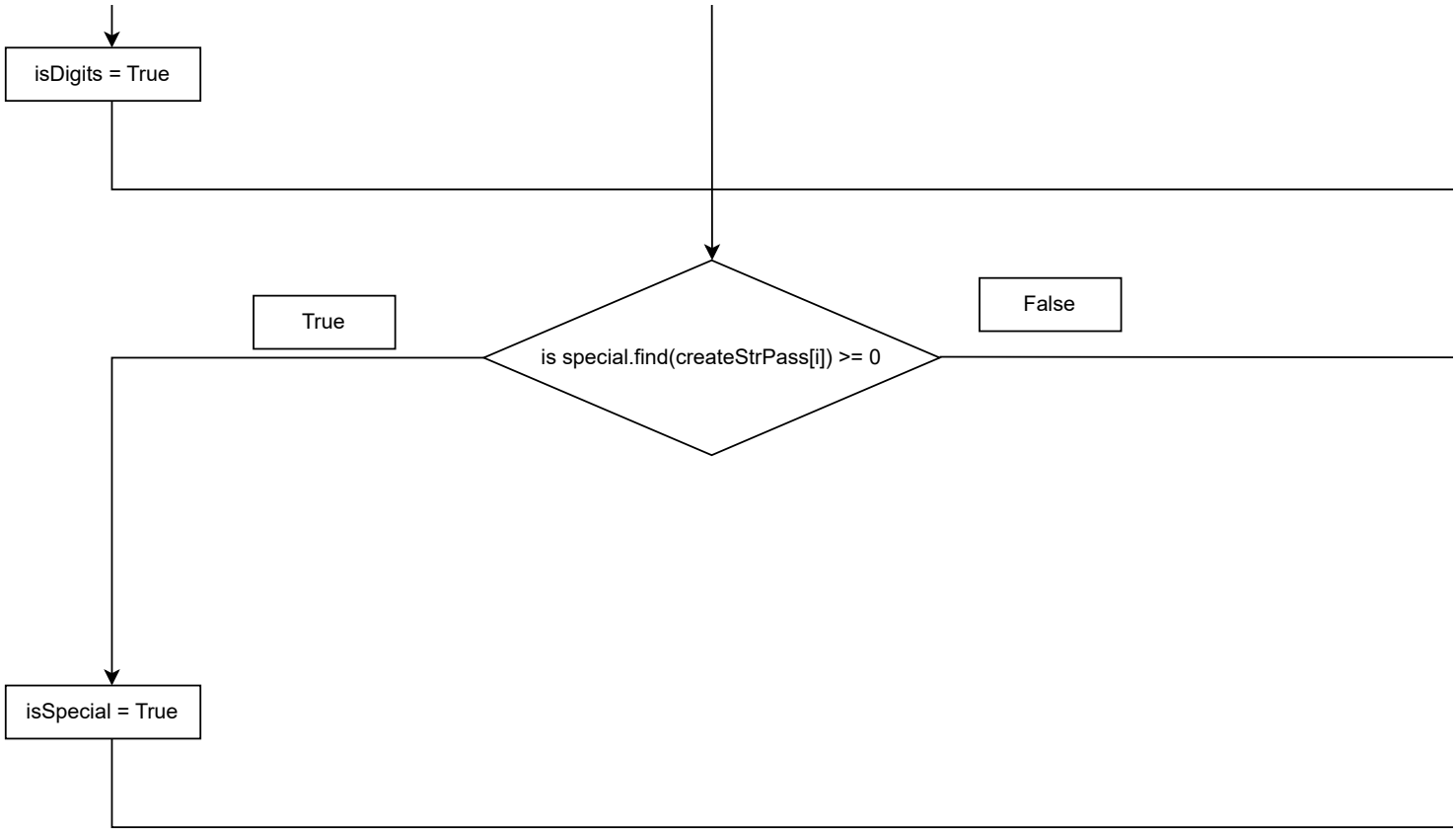


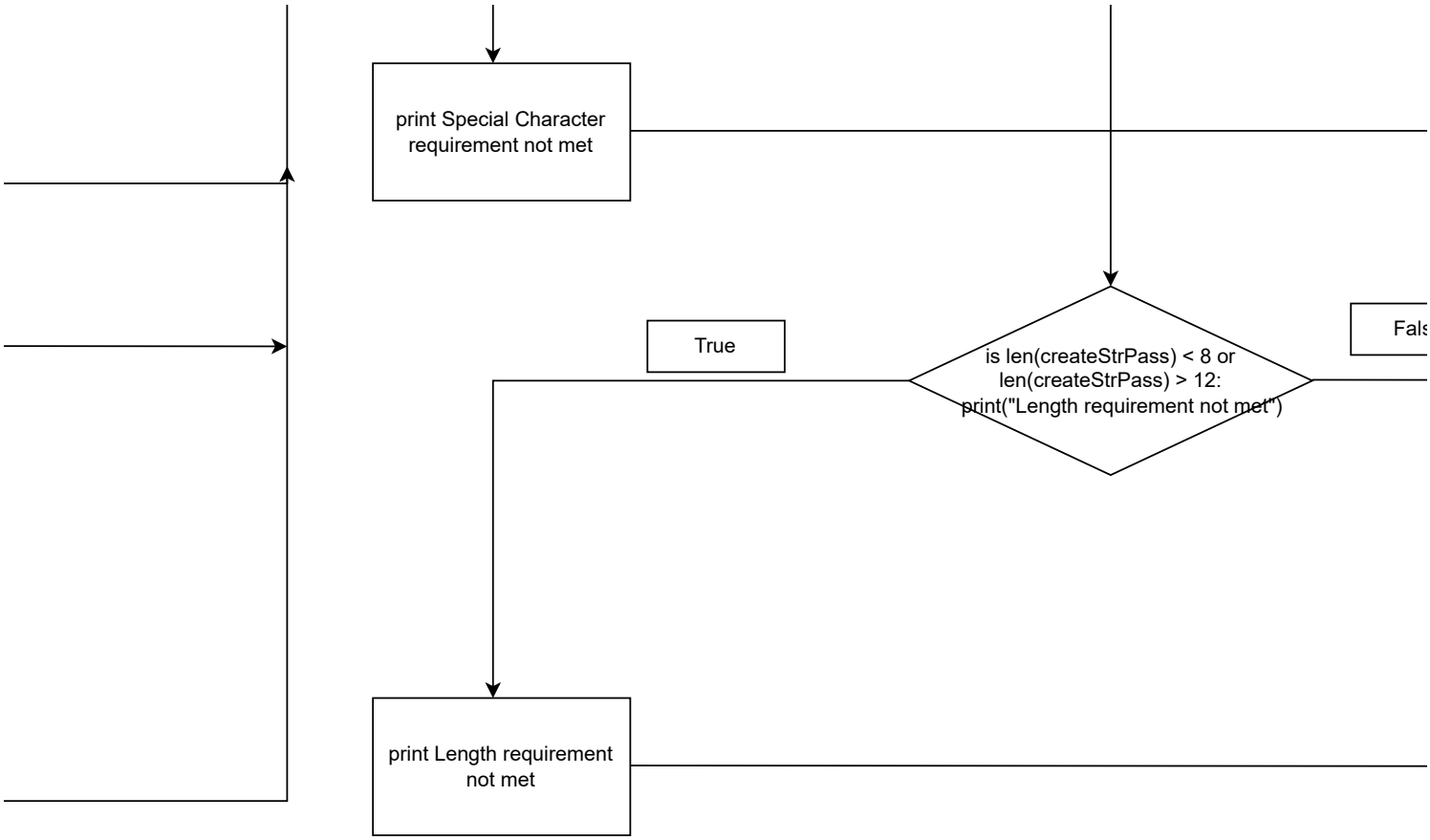

isUpper = True
True
is lowerCase.find(createStrPass[i]) >= 0
False
lowerCase = True
True
is upperCase.find(createStrPass[i]) >= 0
False
isUpper = True
True
is digits.find(createStrPass[i]) >= 0
False

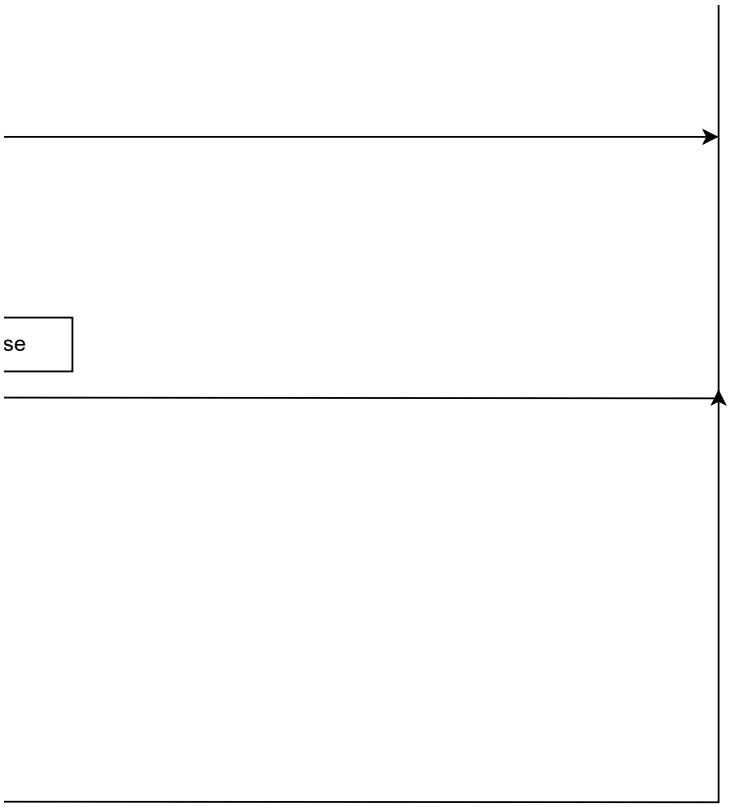

print Uppercase requirement not met
True
is  if isLower == False:
Fals
print Lowercase requirement not met
True
is isDigits == False:
Fals
print Number requirement not met
True
isSpecial == False:
Fals

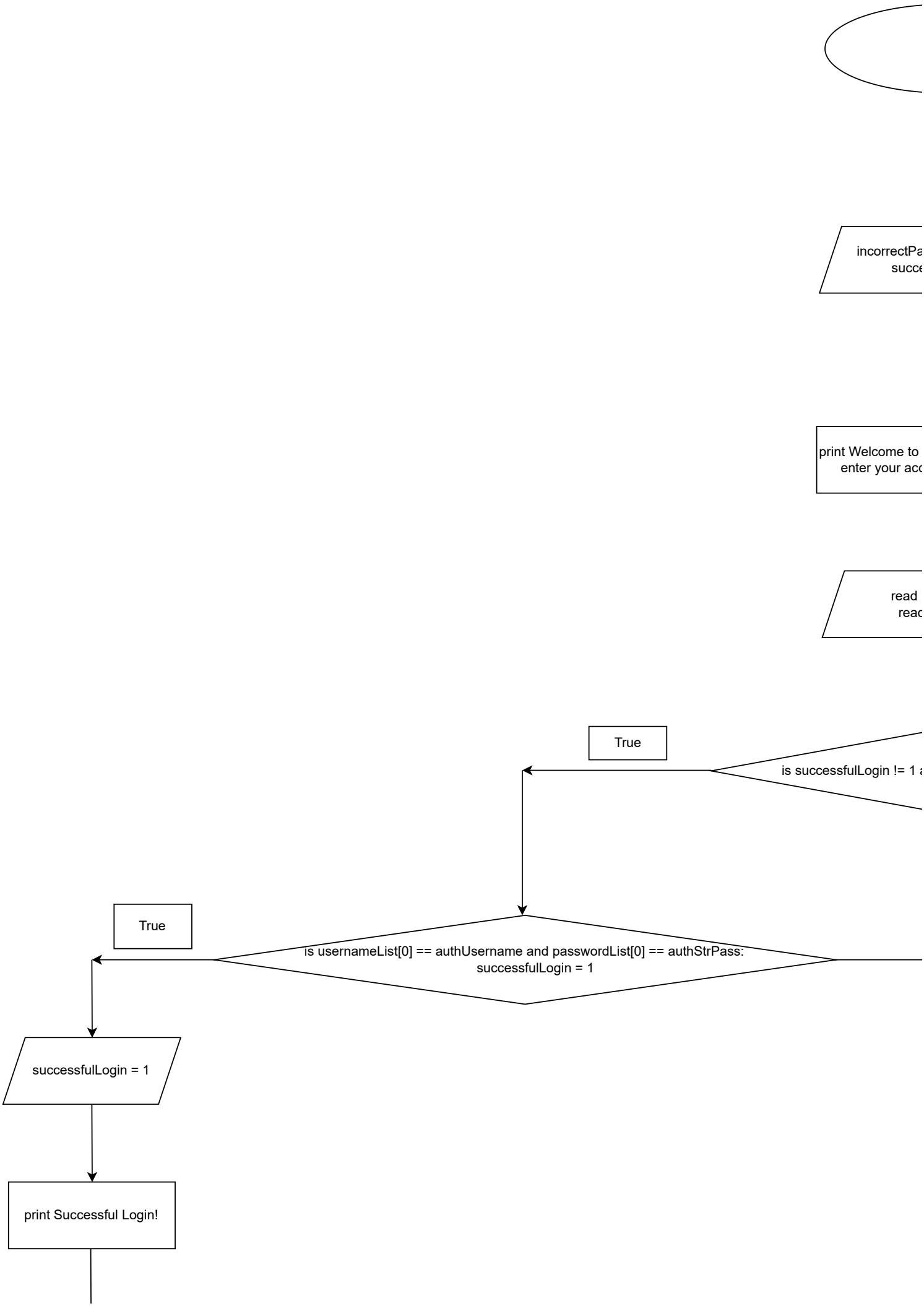

True
se
question =
random.choice(resetPasswordQuestions)
print(question)
read questionAnswer
se
askedResetPasswordOptions.append(question)
resetPasswordAnswers.append(questionAnswer)
se

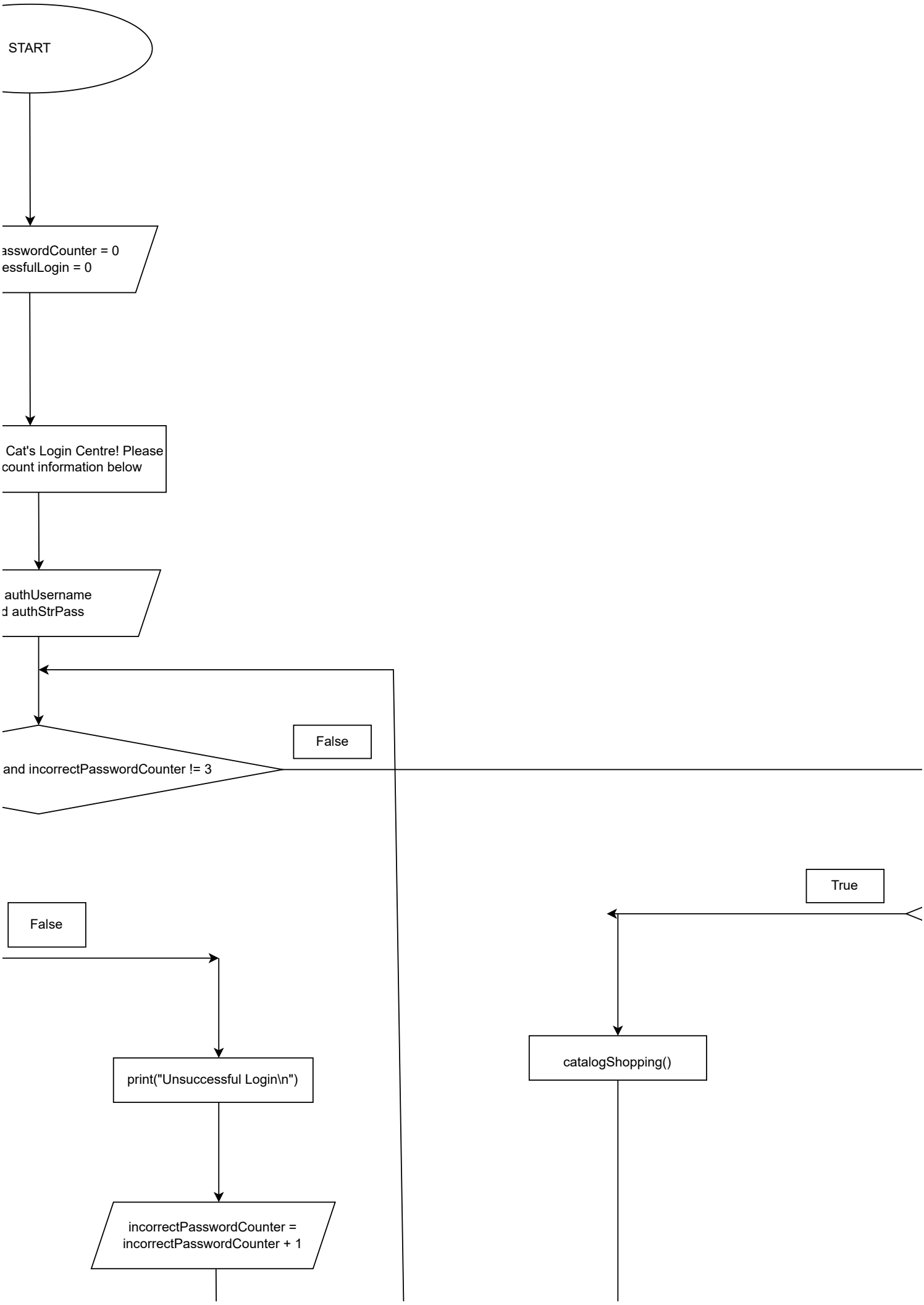

i = i + 1
i < 3
False
loginSystem()
END

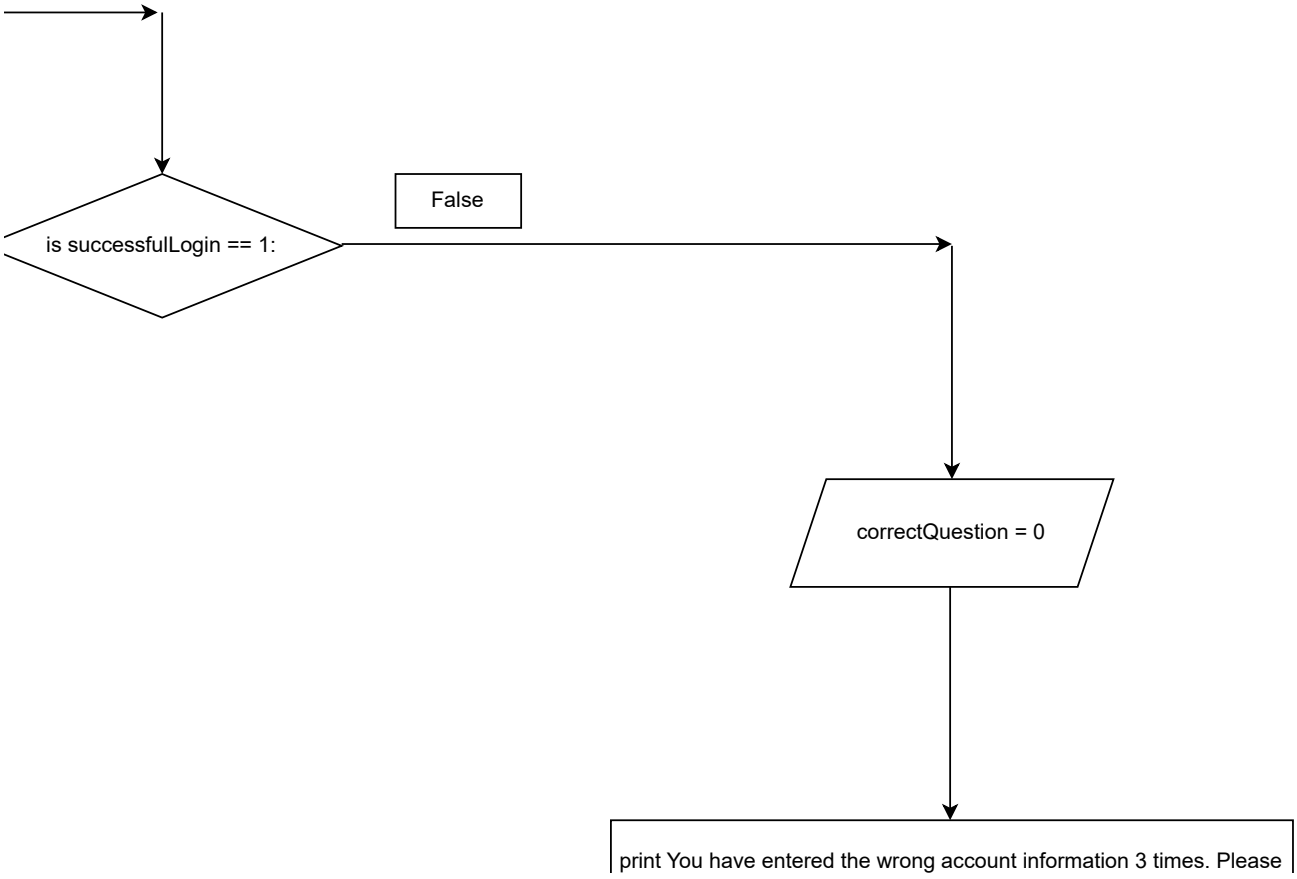

isDigits = True
is special.find(createStrPass[i]) >= 0
True
False
isSpecial = True

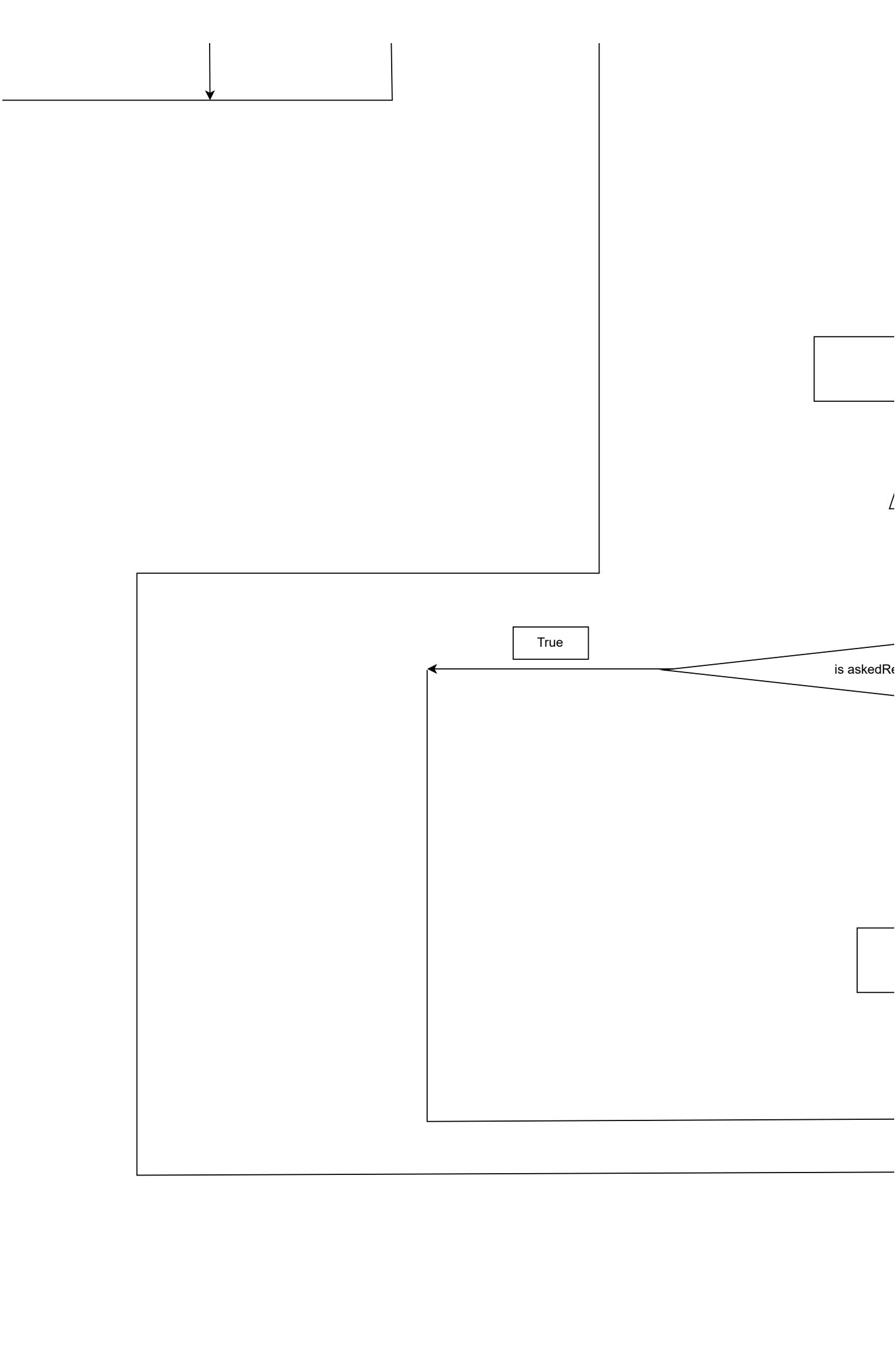

print Special Character requirement not met
True
is len(createStrPass) < 8 or len(createStrPass) > 12: print("Length requirement not met")
print Length requirement not met

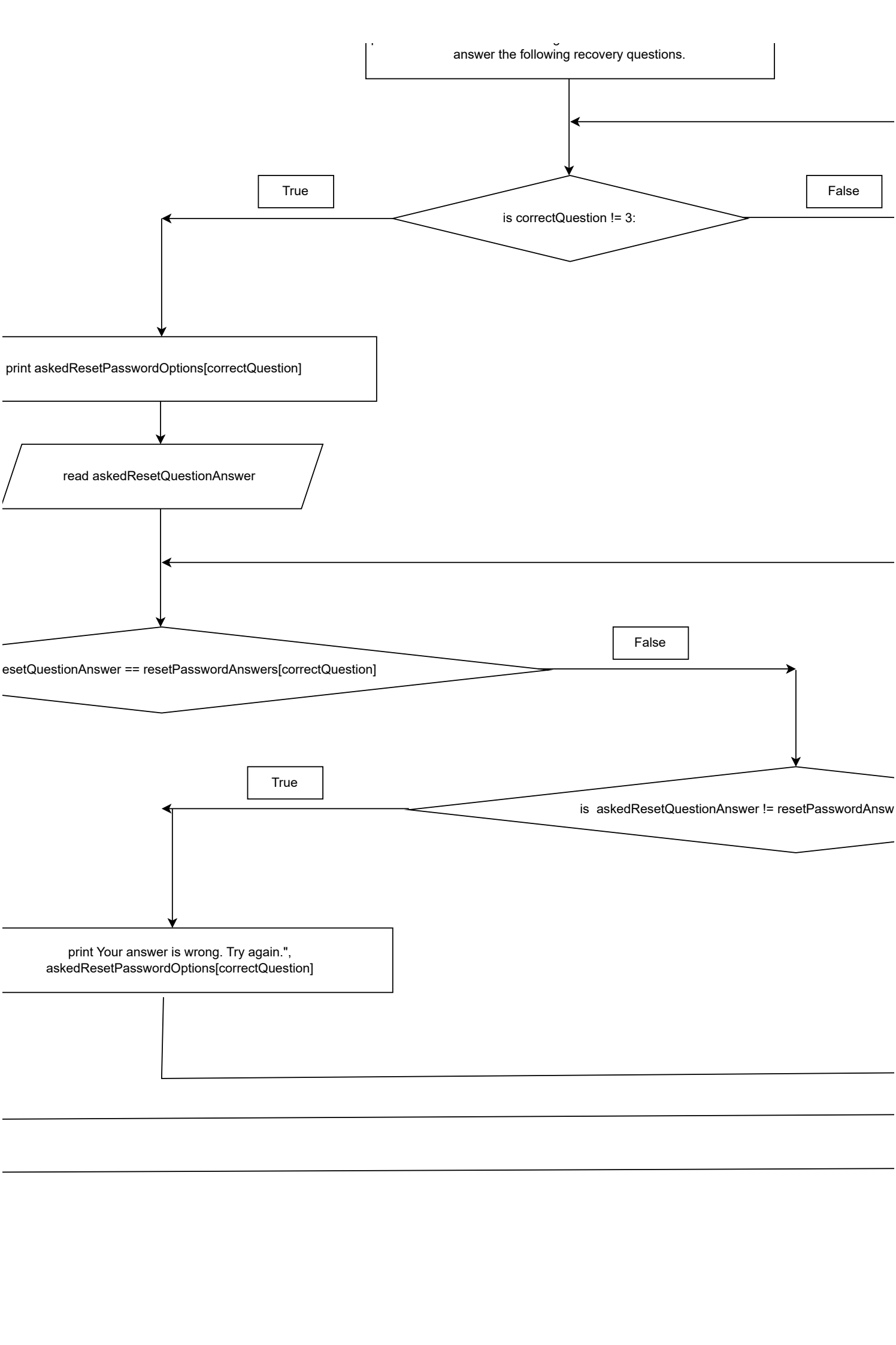

se

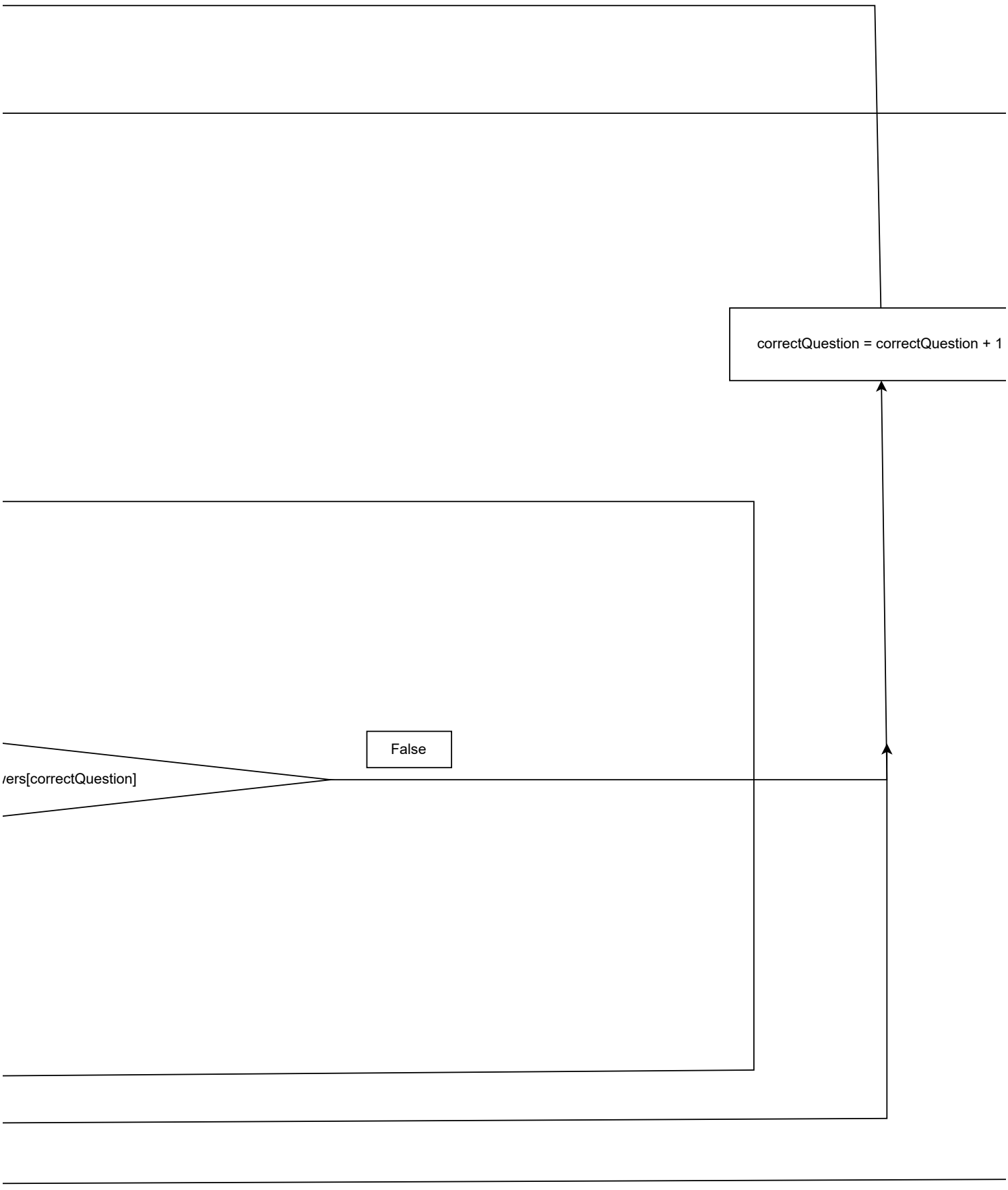

incorrectPa
succe
print Welcome to
enter your acc
read
read
True
is successfulLogin != 1 a
True
is usernameList[0] == authUsername and passwordList[0] == authStrPass:
successfulLogin = 1
successfulLogin = 1
print Successful Login!

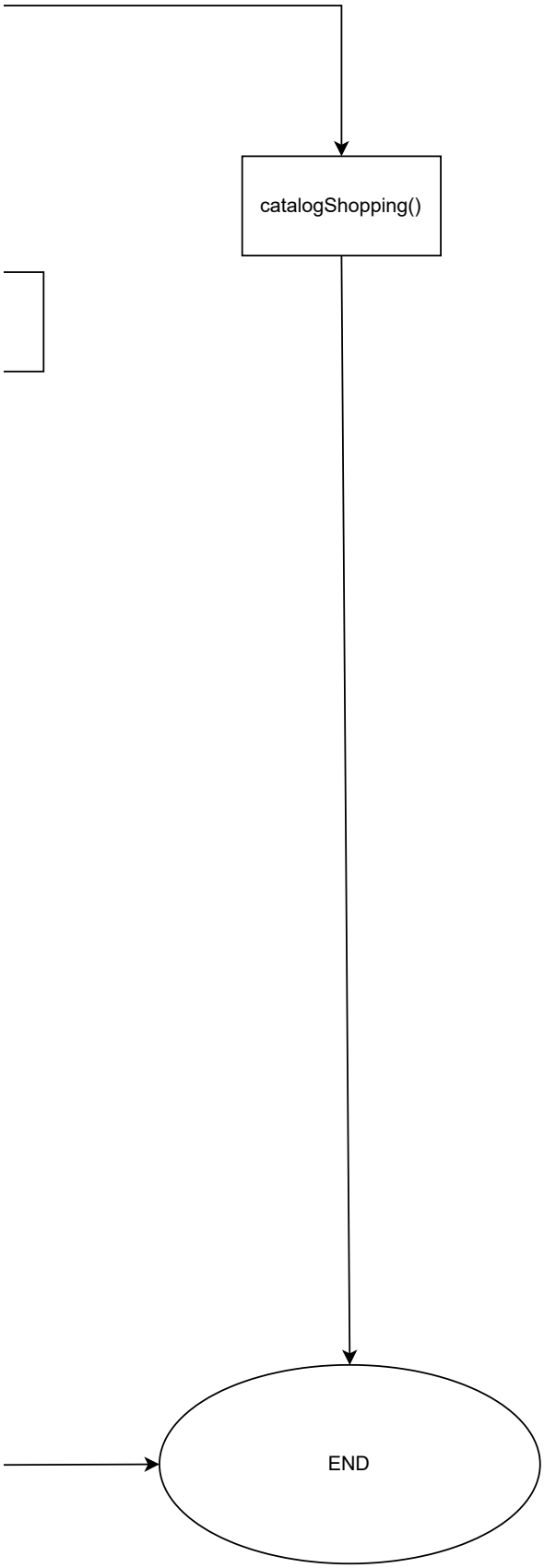

START
asswordCounter = 0
essfulLogin = 0
Cat's Login Centre! Please
count information below
authUsername
d authStrPass
and incorrectPasswordCounter != 3
False
True
False
print("Unsuccessful Login\n")
incorrectPasswordCounter =
incorrectPasswordCounter + 1
catalogShopping()

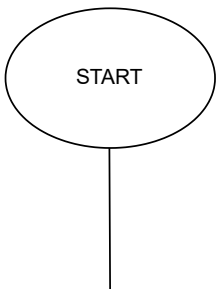

is successfulLogin == 1:
False
correctQuestion = 0
print You have entered the wrong account information 3 times. Please

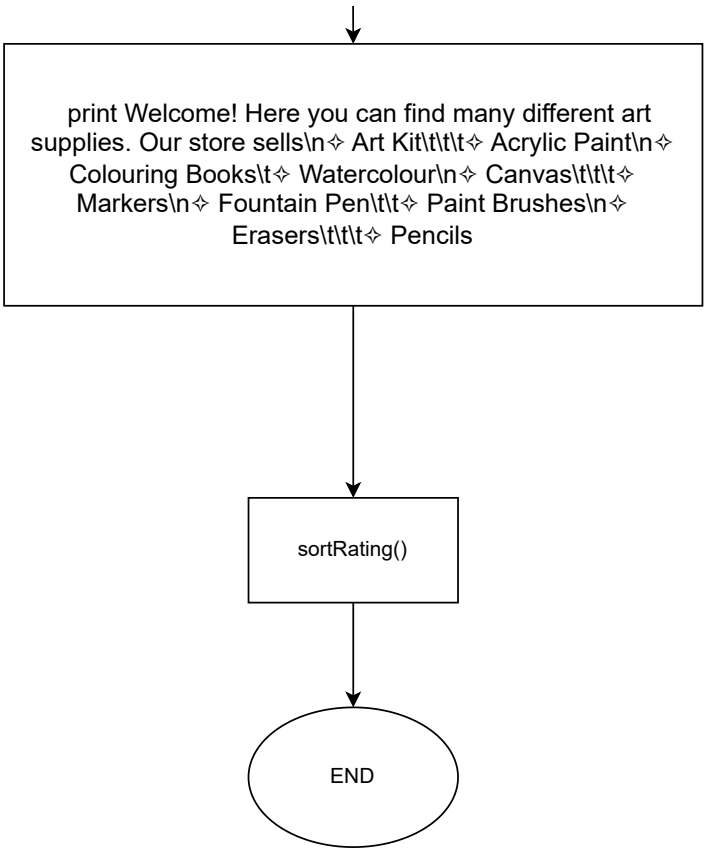

True
is askedRe

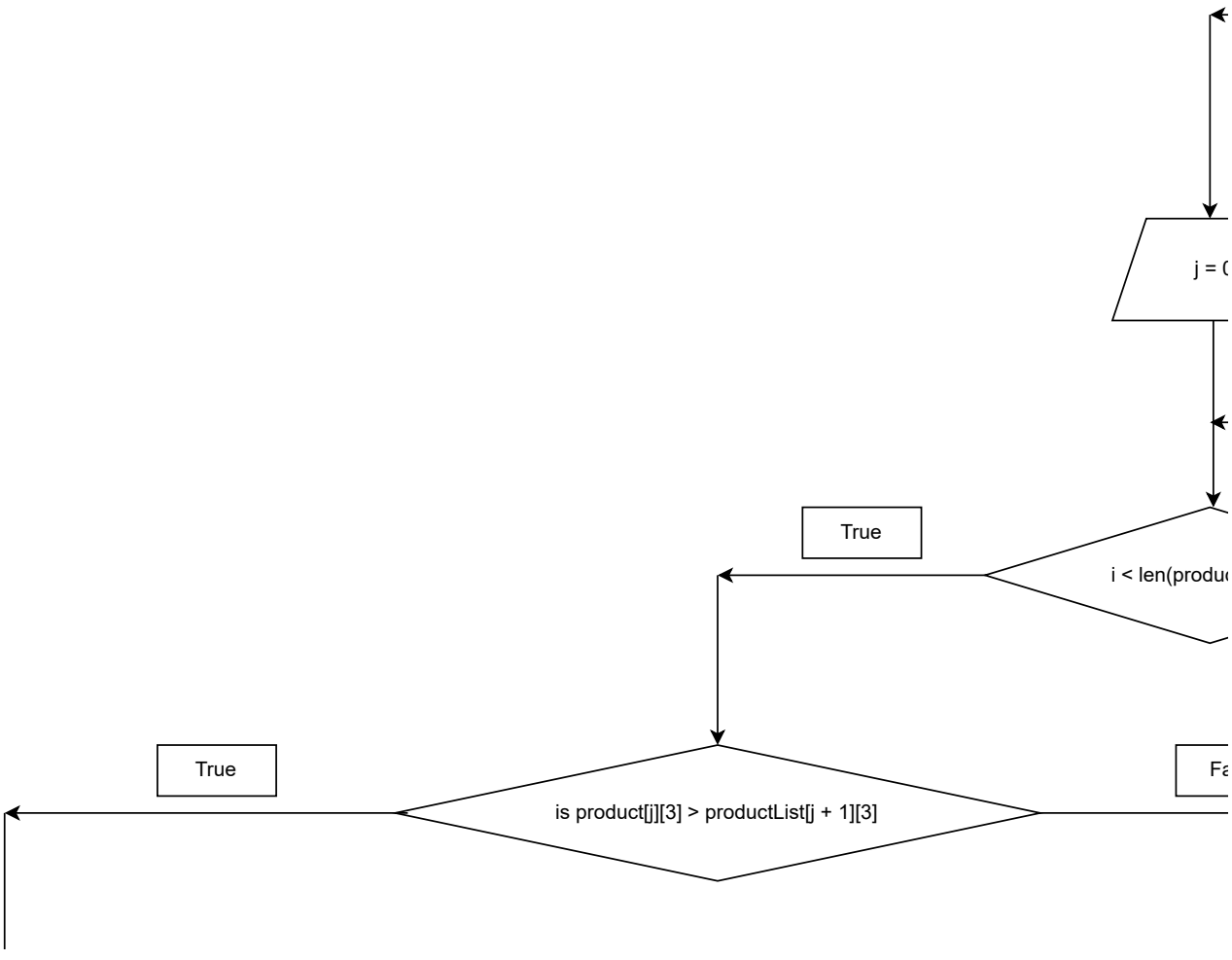

answer the following recovery questions.
True
is correctQuestion != 3:
False
print askedResetPasswordOptions[correctQuestion]
read askedResetQuestionAnswer
esetQuestionAnswer == resetPasswordAnswers[correctQuestion]
False
True
is askedResetQuestionAnswer != resetPasswordAnsw
print Your answer is wrong. Try again.",
askedResetPasswordOptions[correctQuestion]

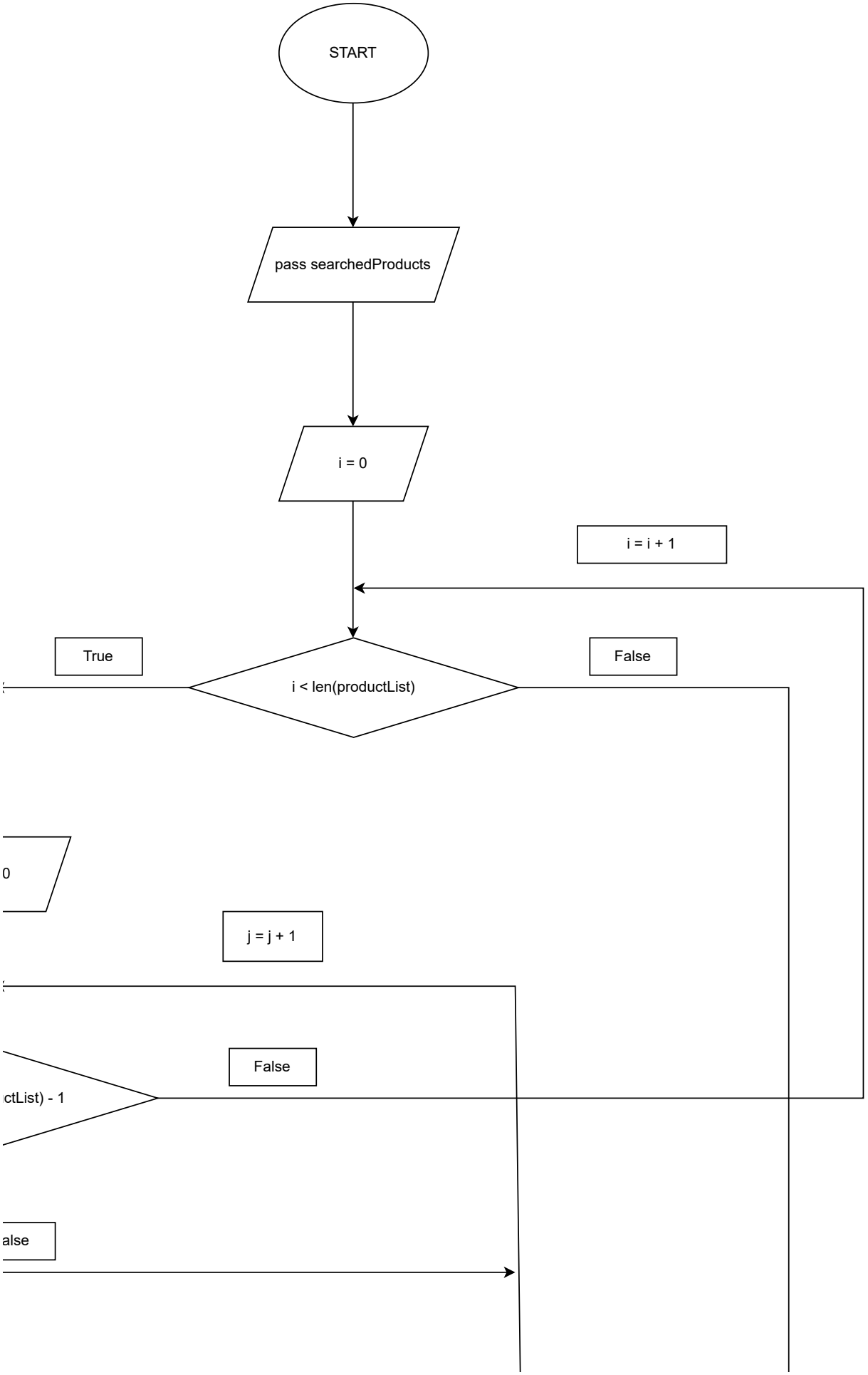

correctQuestion = correctQuestion + 1
False
/ers[correctQuestion]

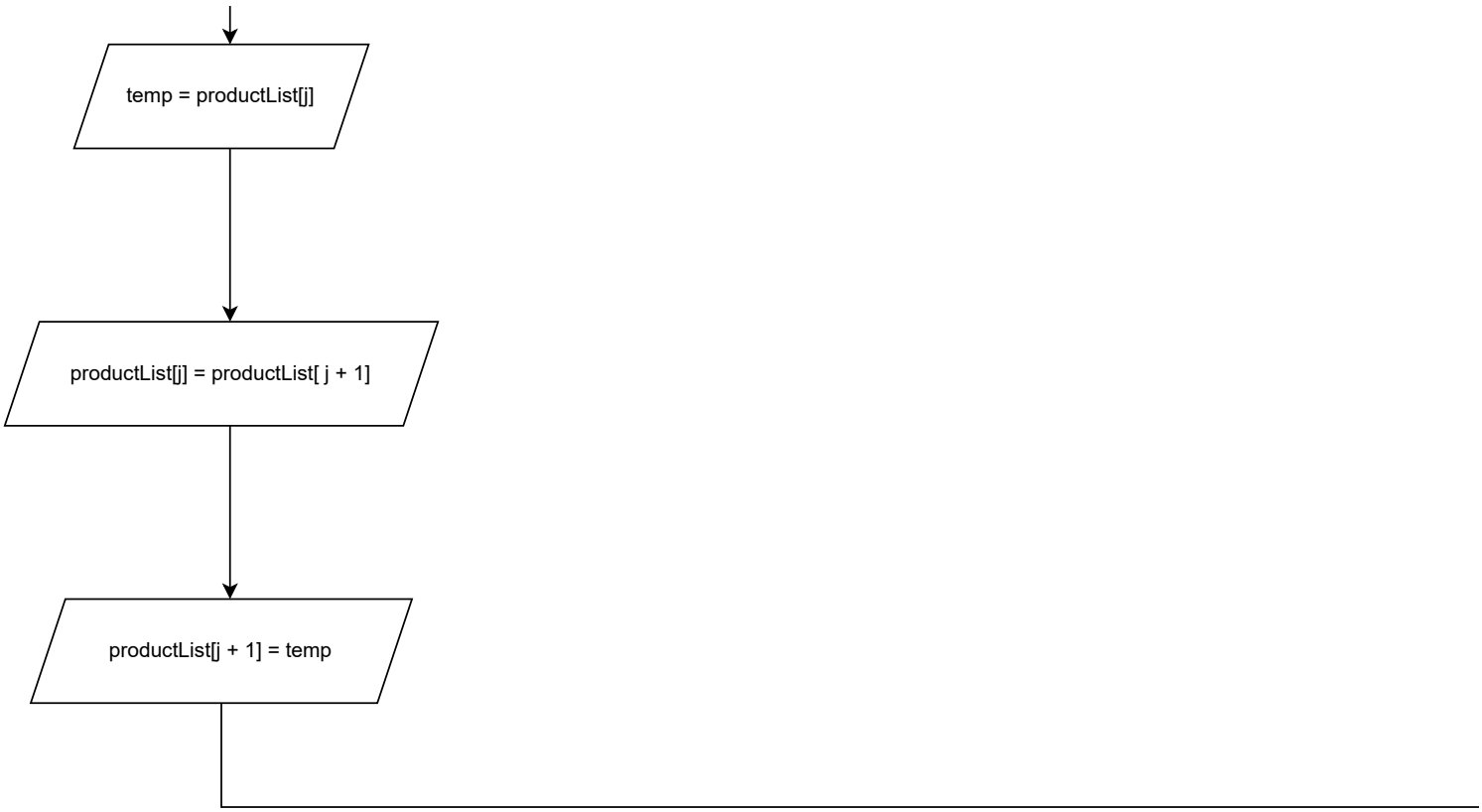

catalogShopping()
END

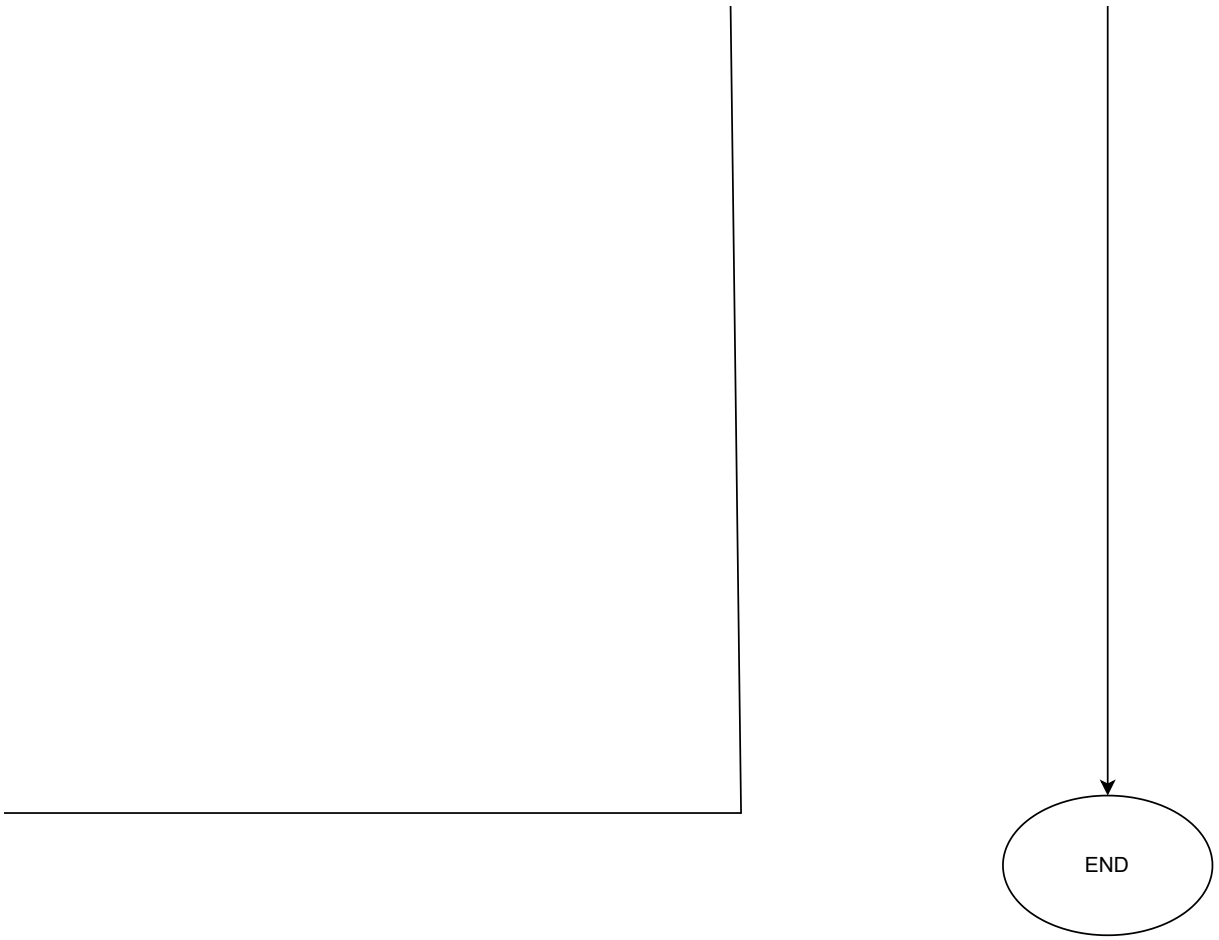

START

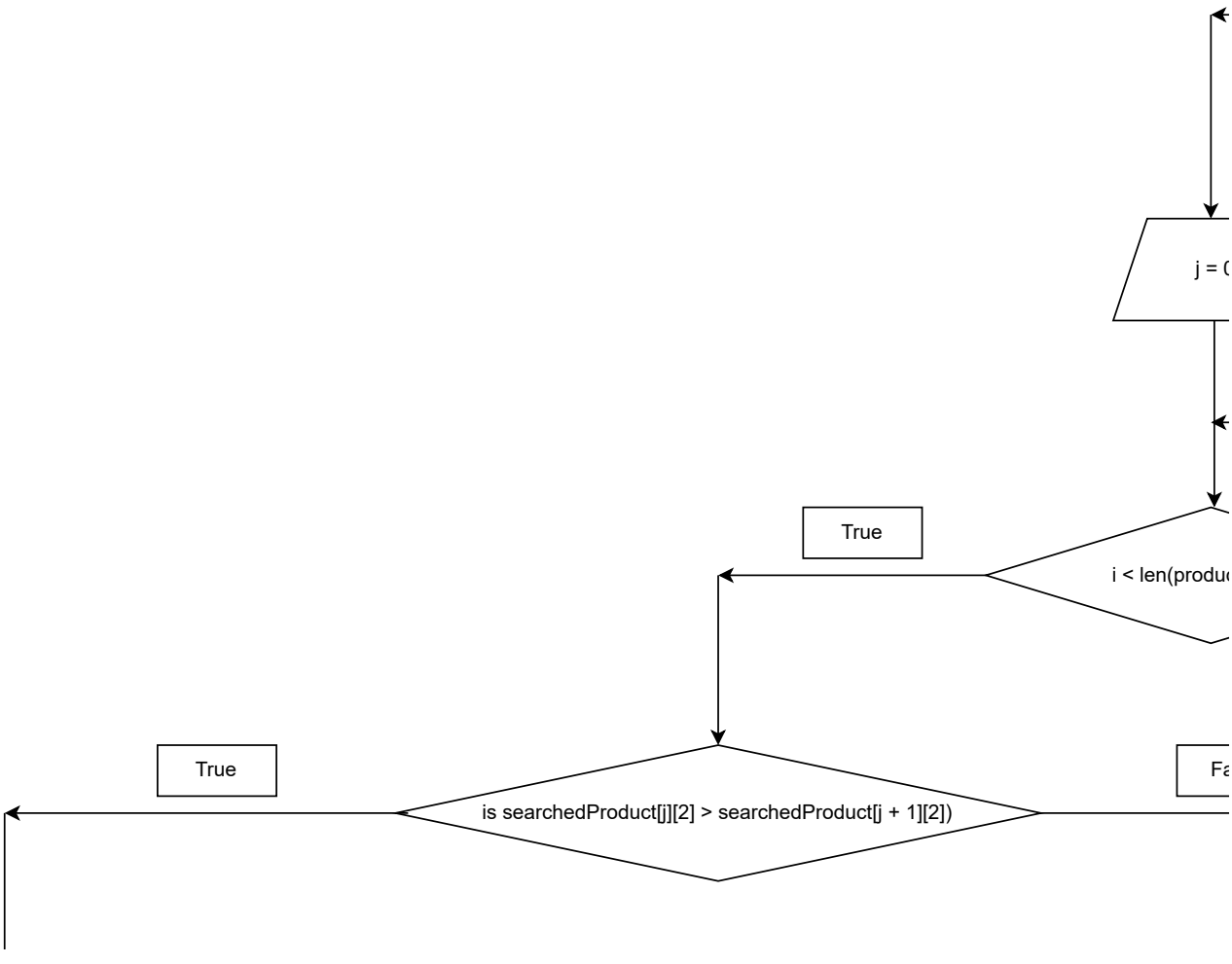

print Welcome! Here you can find many different art supplies. Our store sells\n✧ Art Kit\t\t\t✧ Acrylic Paint\n✧ Colouring Books\t✧ Watercolour\n✧ Canvas\t\t\t✧ Markers\n✧ Fountain Pen\t\t✧ Paint Brushes\n✧ Erasers\t\t\t✧ Pencils
sortRating()
END

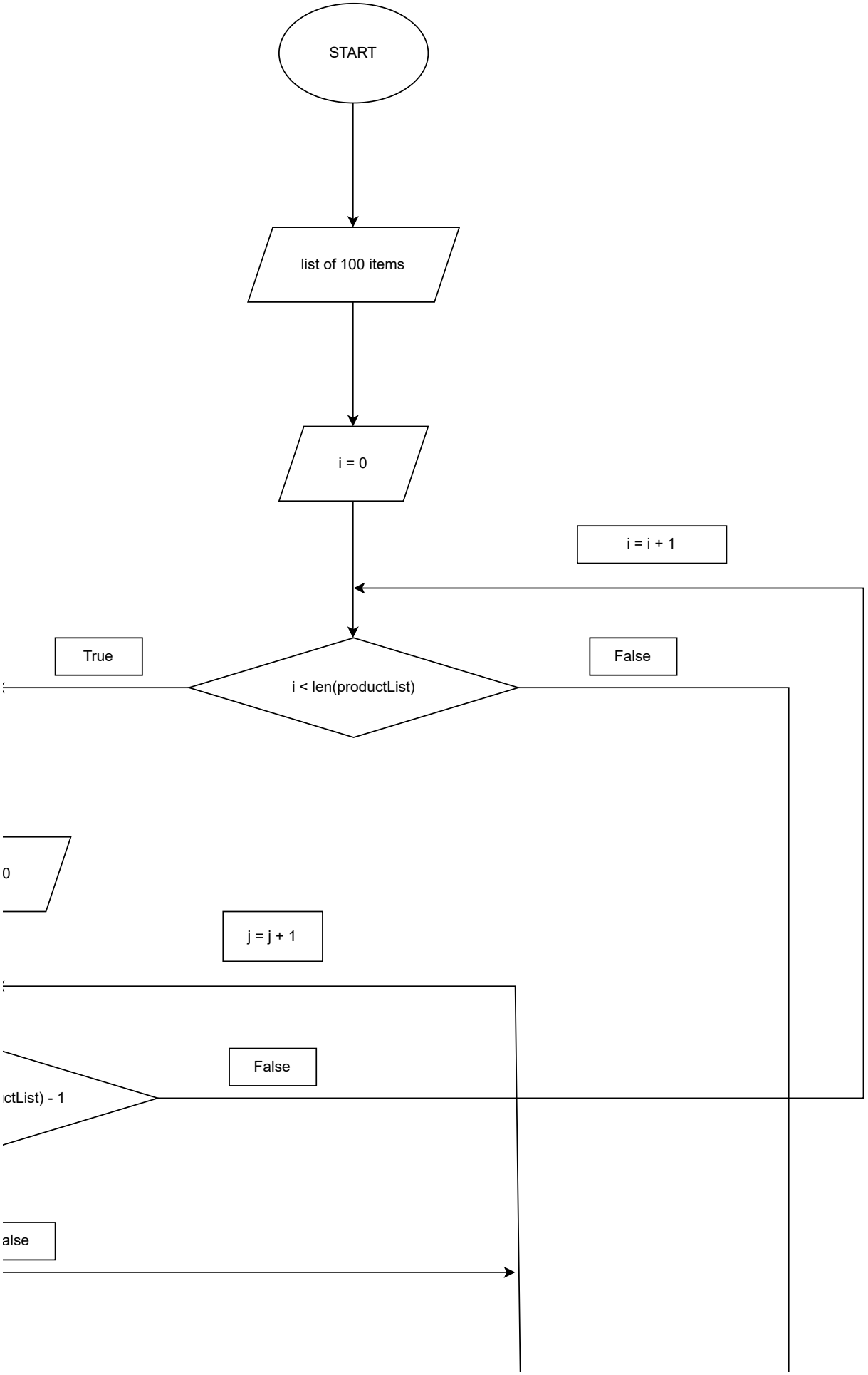

j = 0
True
i < len(produ
True
is product[j][3] > productList[j + 1][3]
Fa

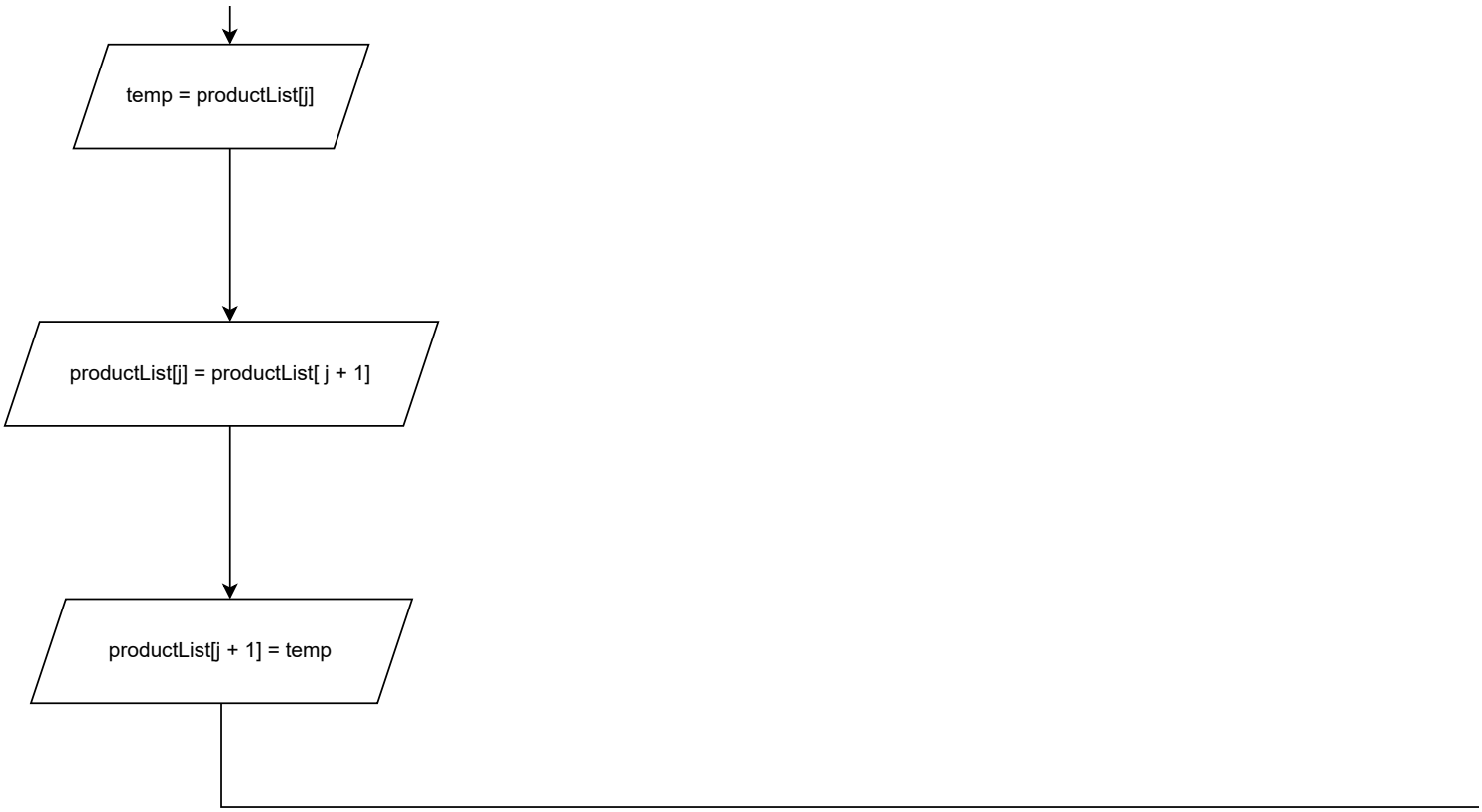

START
pass searchedProducts
i = 0
i = i + 1
True
i < len(productList)
False
0
j = j + 1
False
ctList) - 1
alse

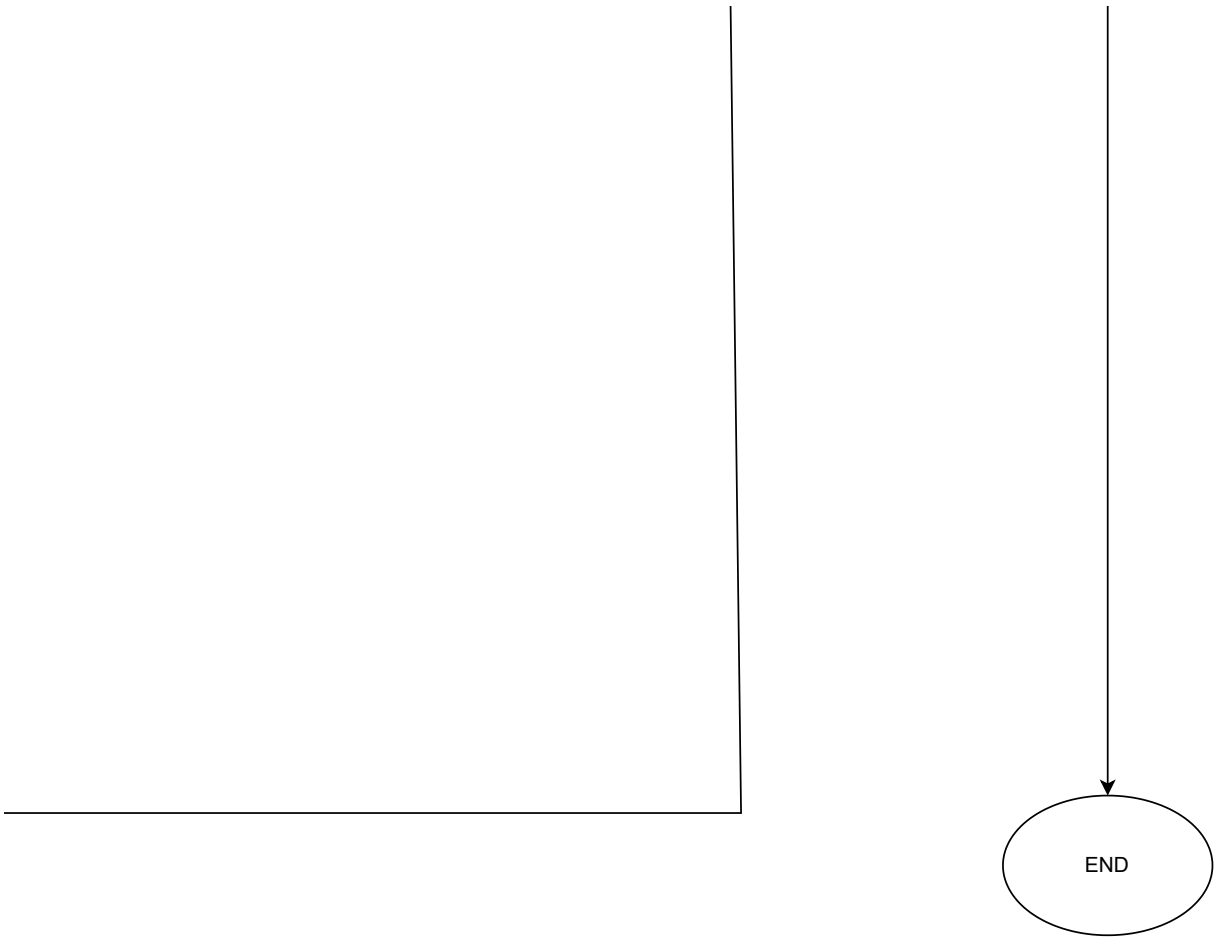

temp = productList[j]
productList[j] = productList[ j + 1]
productList[j + 1] = temp

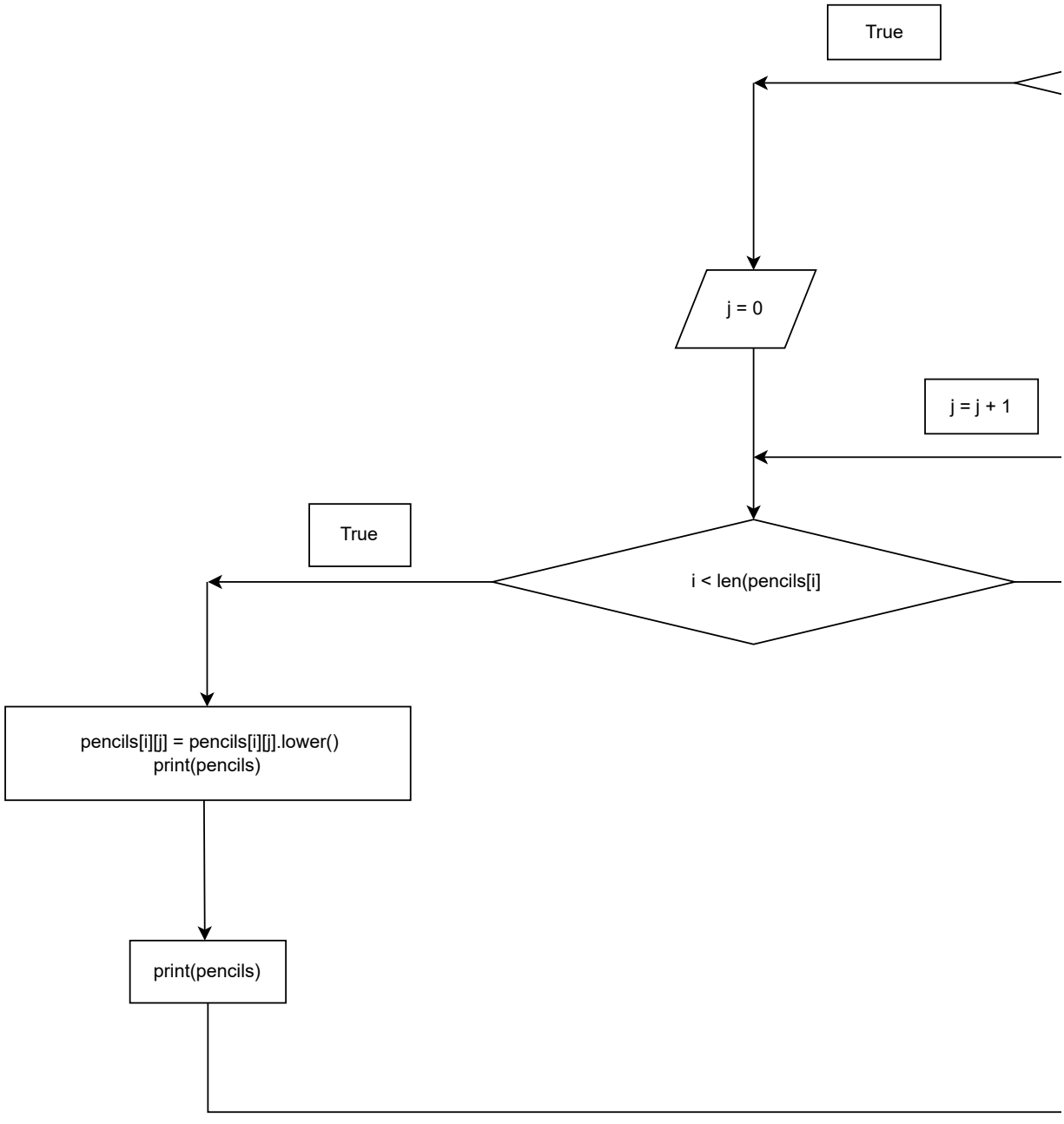

END

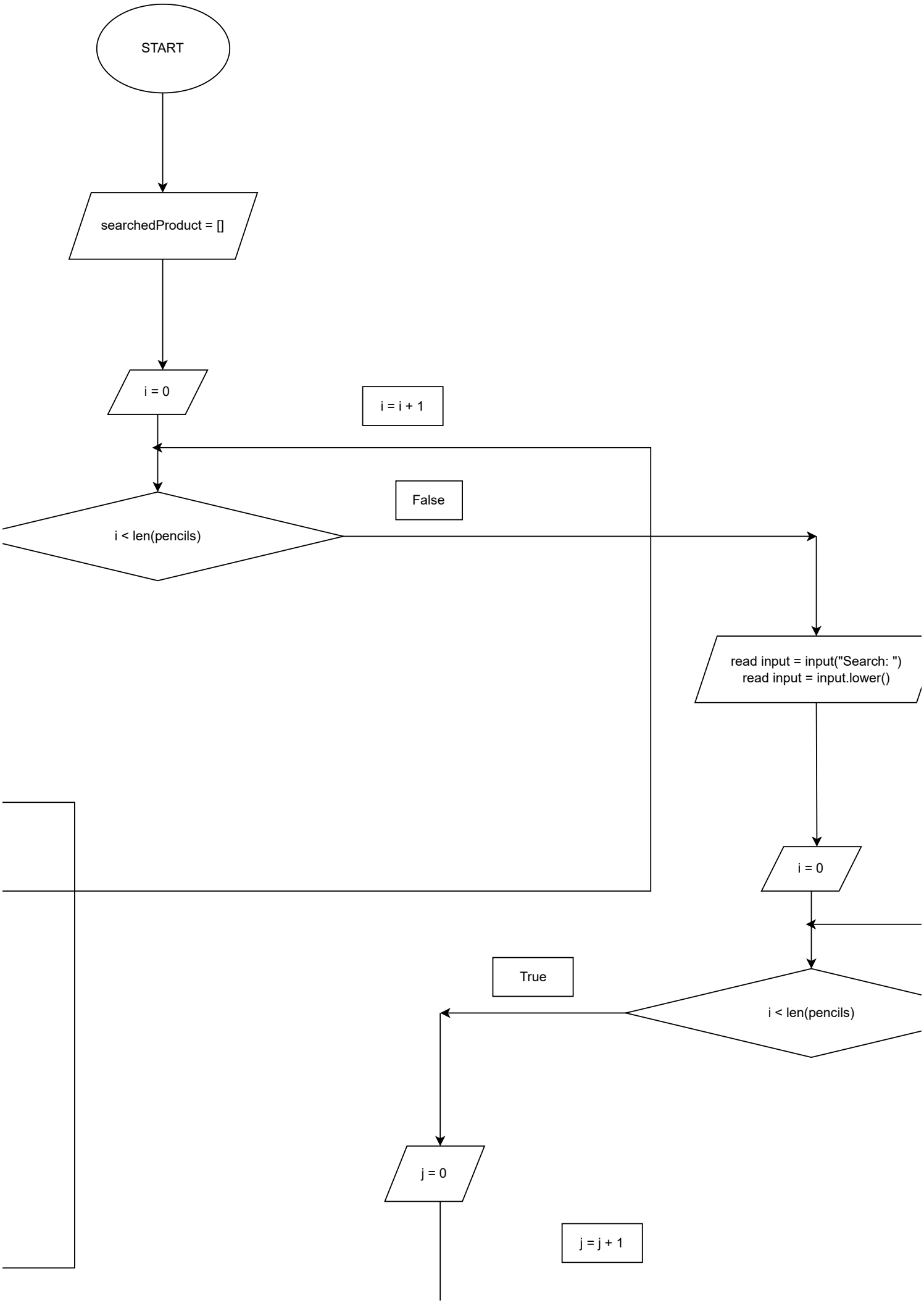

j = 0
True
i < len(produ
True
is searchedProduct[j][2] > searchedProduct[j + 1][2])
Fa

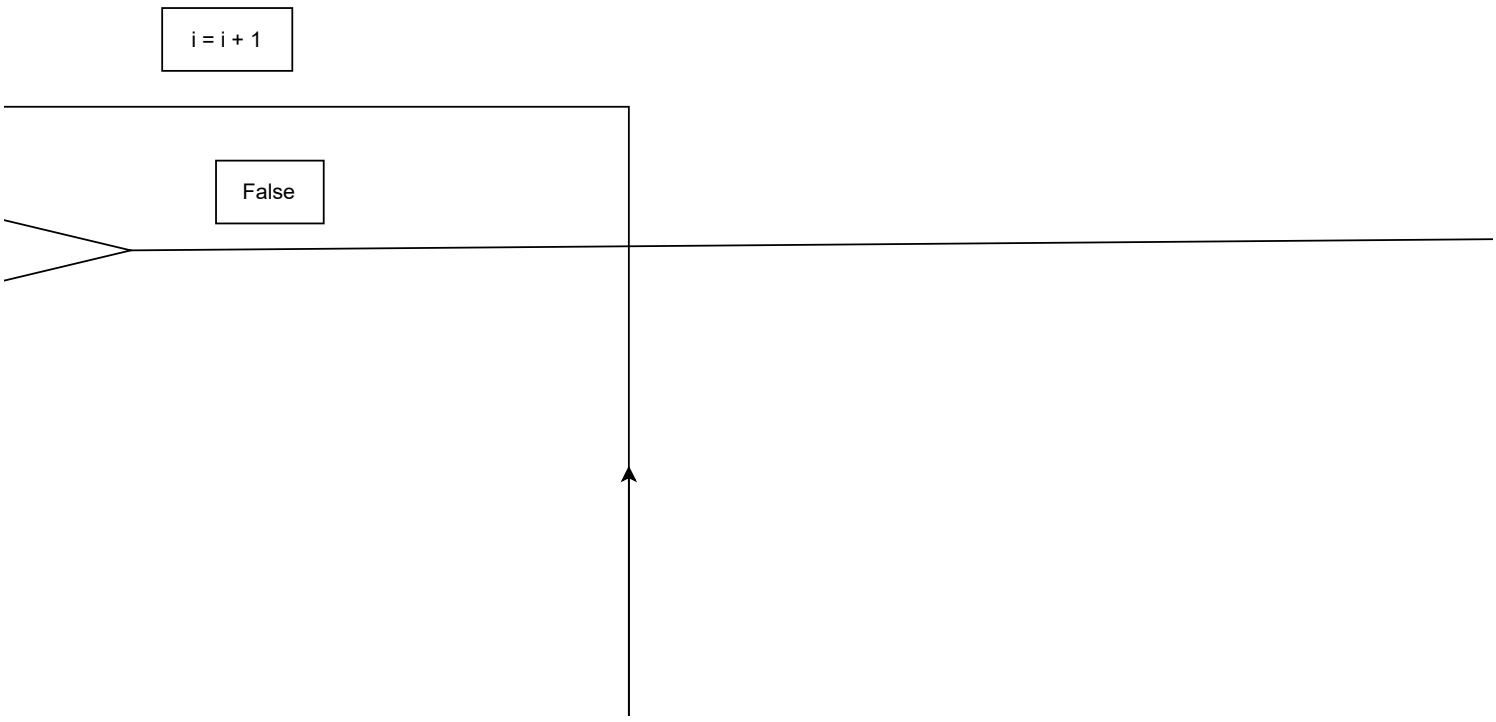

START
list of 100 items
i = 0
i = i + 1
True
False
i < len(productList)
0
j = j + 1
False
ctList) - 1
alse

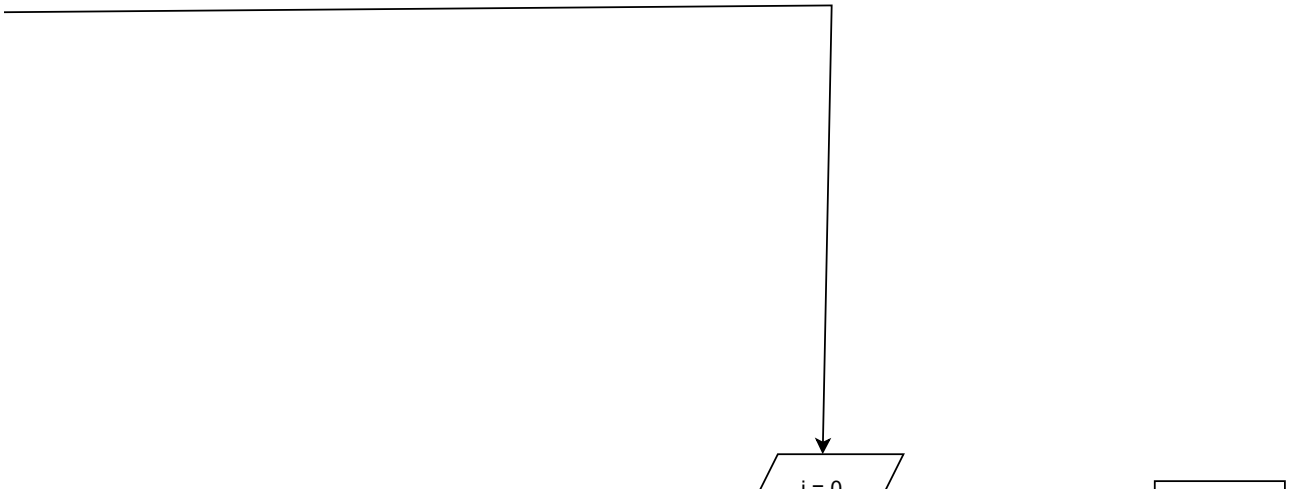

temp = productList[j]
productList[j] = productList[ j + 1]
productList[j + 1] = temp

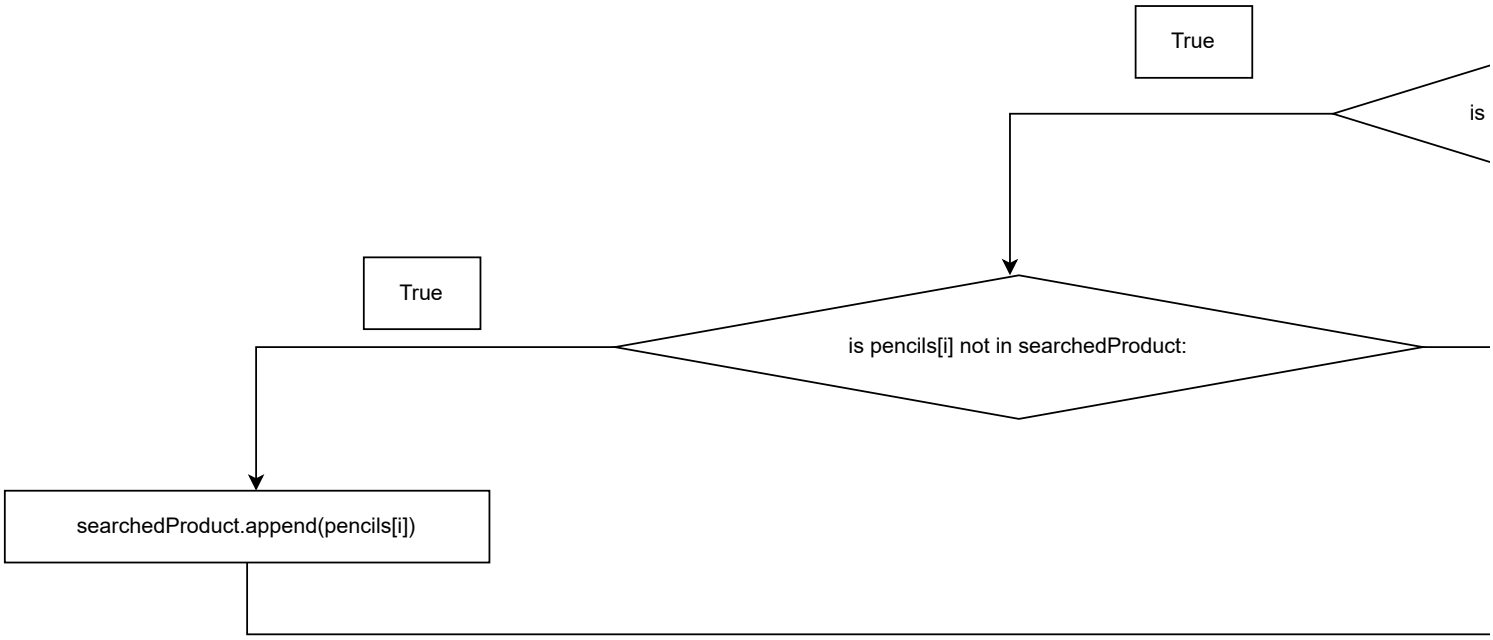

END

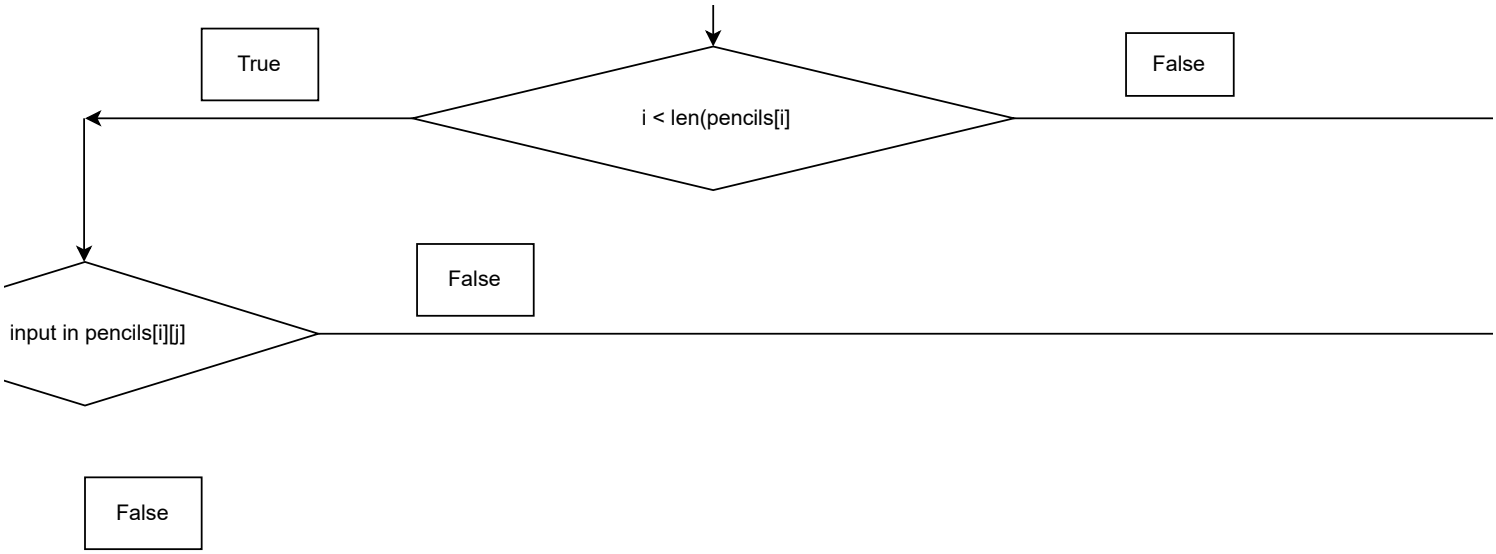

True
j = 0
j = j + 1
True
i < len(pencils[i]
pencils[i][j] = pencils[i][j].lower()
print(pencils)
print(pencils)

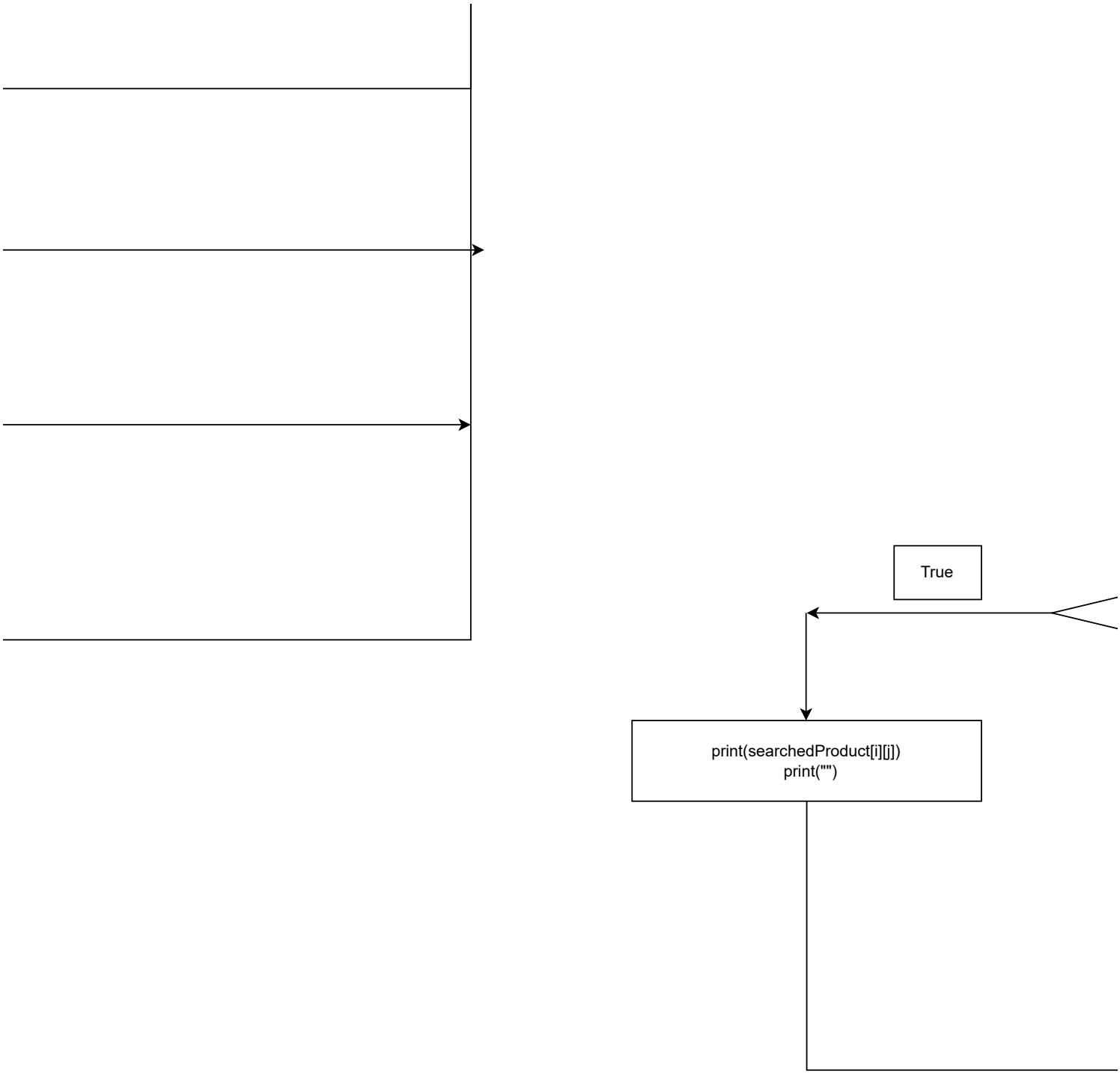

START
searchedProduct = []
i = 0
i = i + 1
False
i < len(pencils)
read input = input("Search: ")
read input = input.lower()
i = 0
True
i < len(pencils)
j = 0
j = j + 1

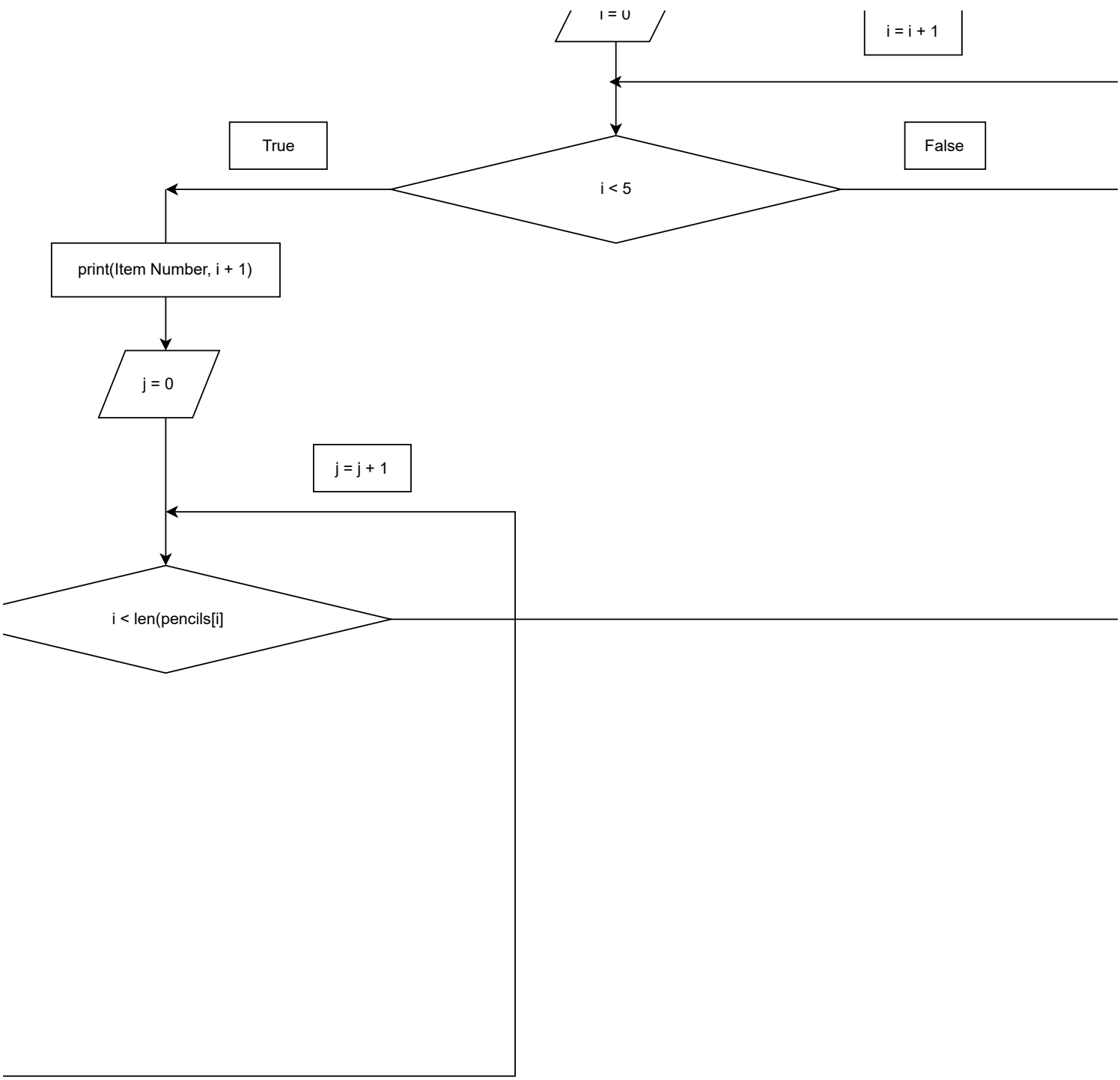

i = i + 1
False

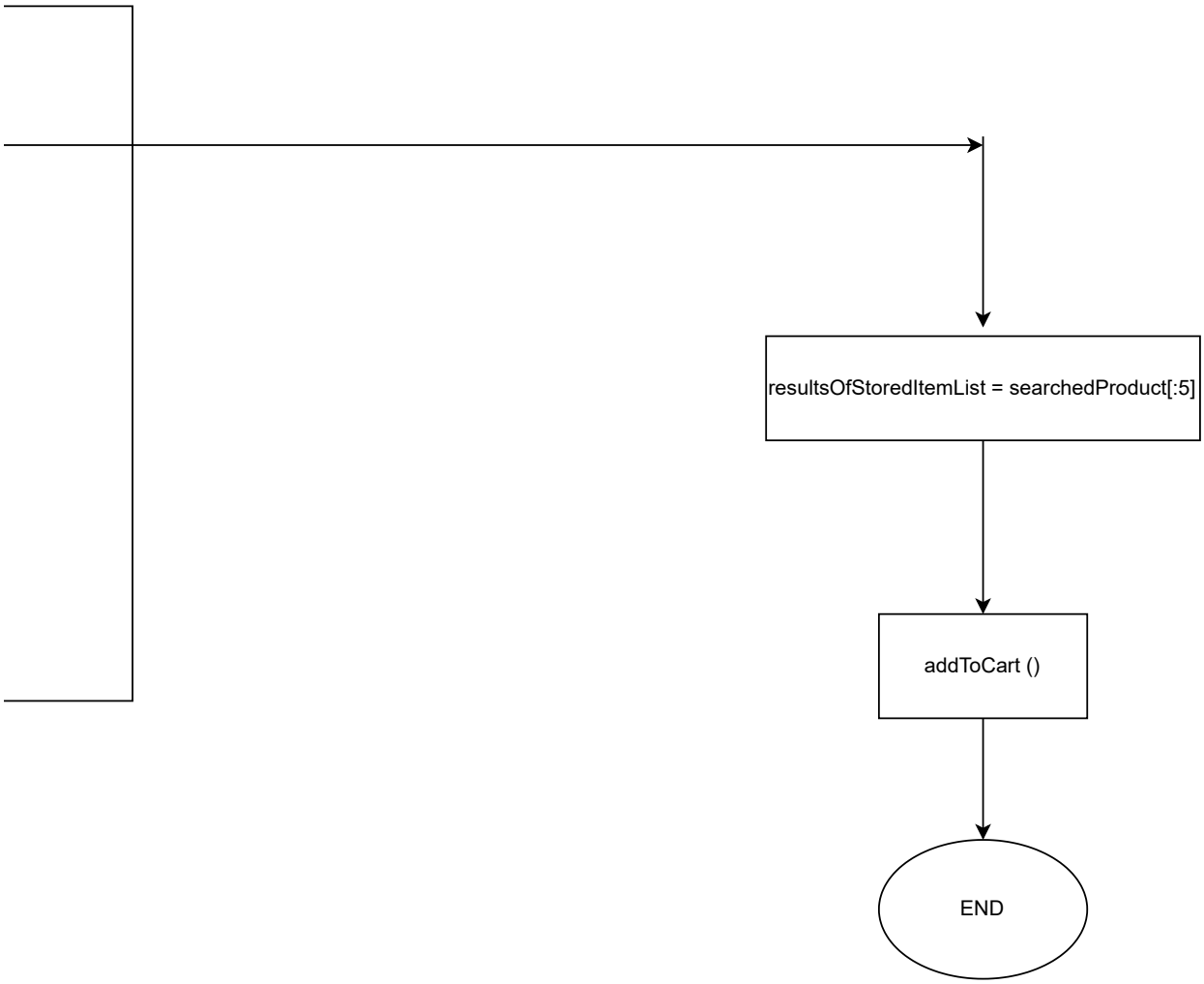

i = 0

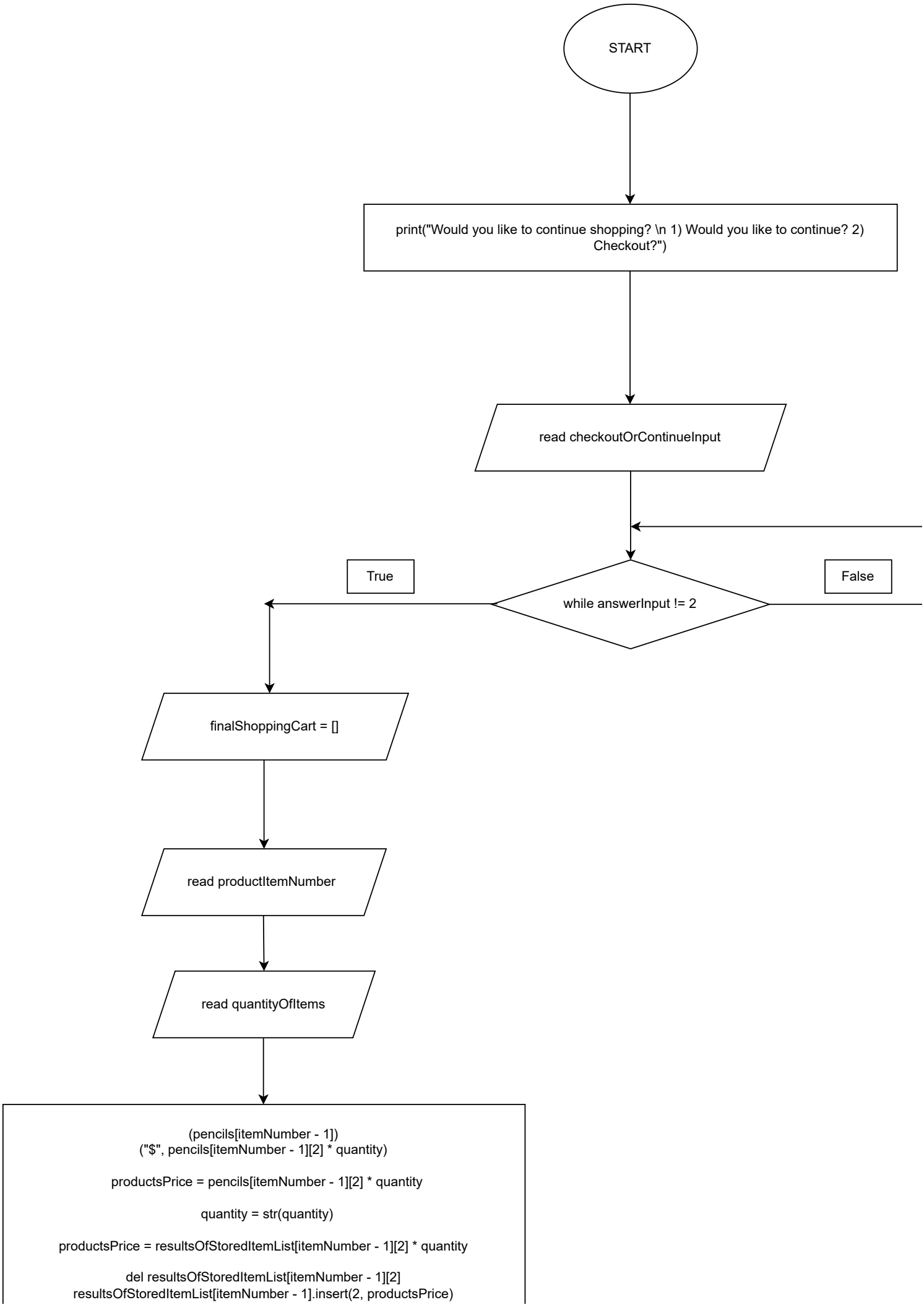

True
is
True
is pencils[i] not in searchedProduct:
searchedProduct.append(pencils[i])

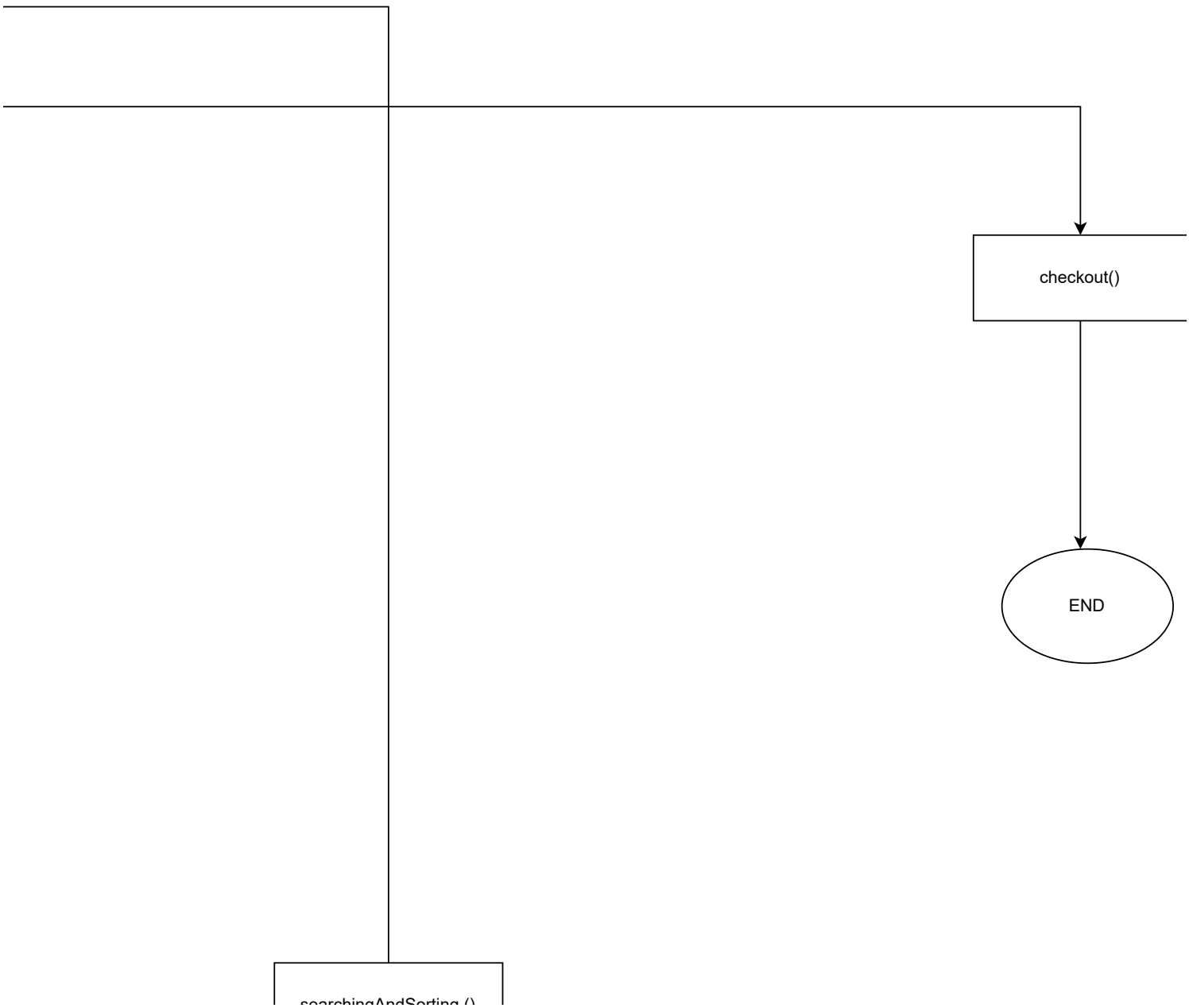

True
i < len(pencils[i]
False
False
input in pencils[i][j]
False


True
print(searchedProduct[i][j])
print("")

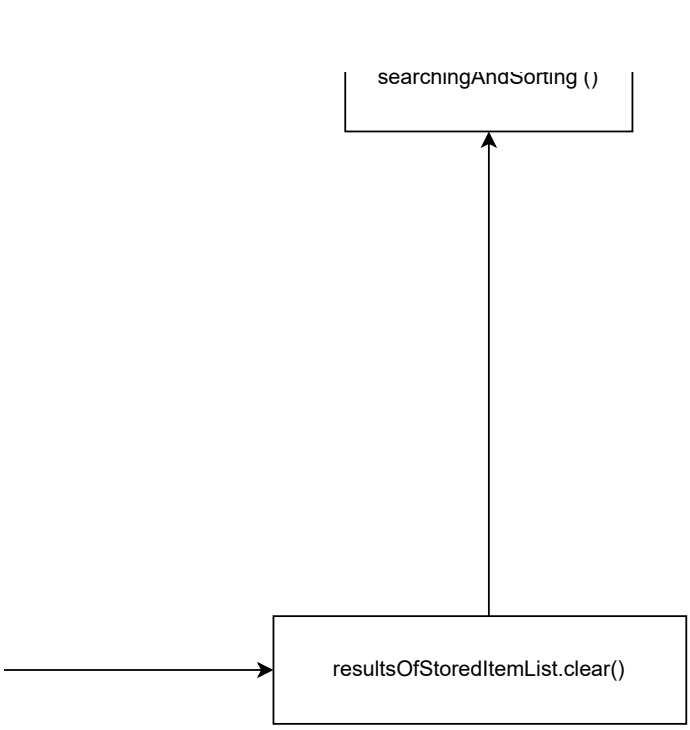

i = 0
i = i + 1
True
False
i < 5
print(Item Number, i + 1)
j = 0
j = j + 1
i < len(pencils[i]

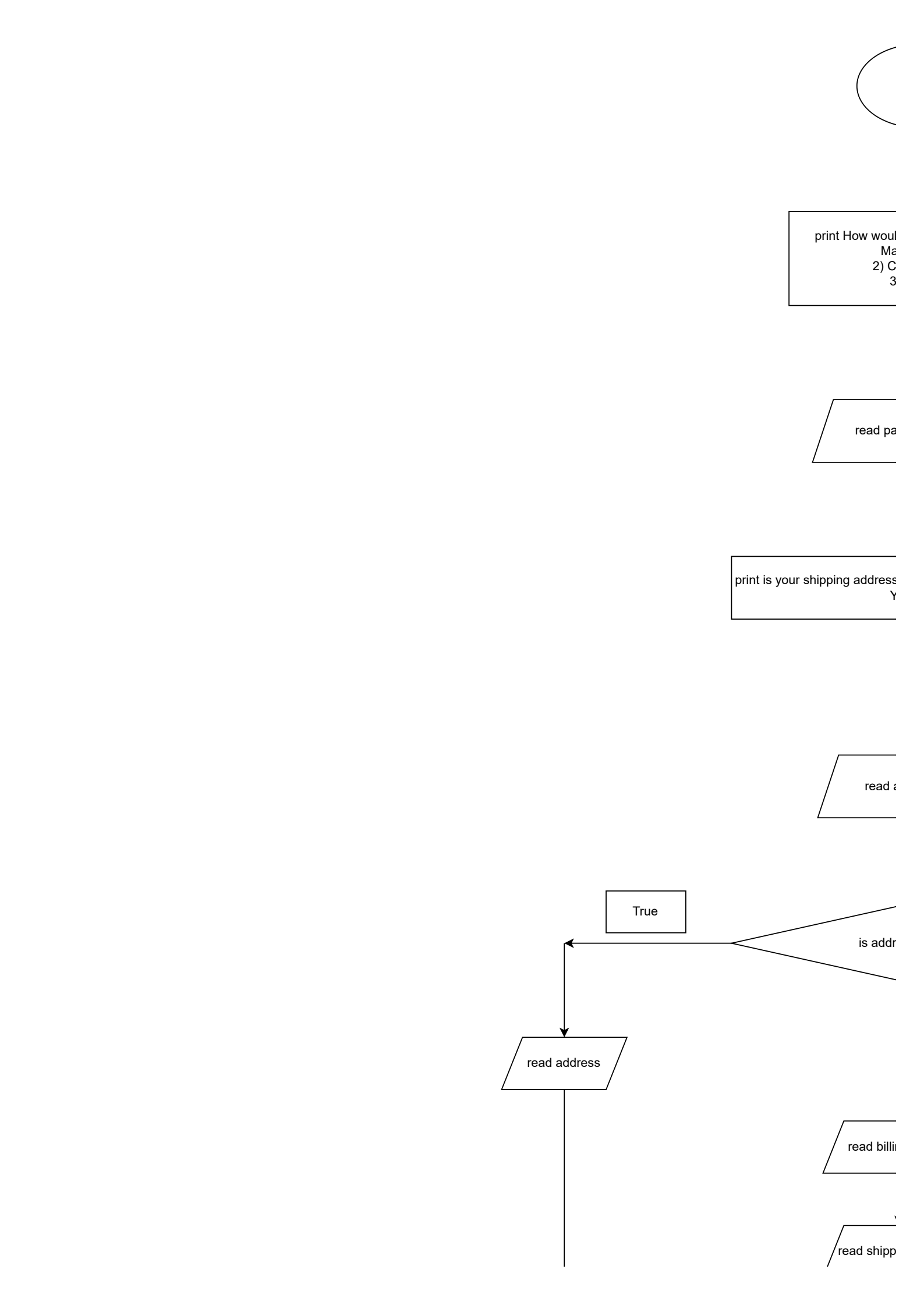

resultsOfStoredItemList = searchedProduct[:5]
addToCart ()
END

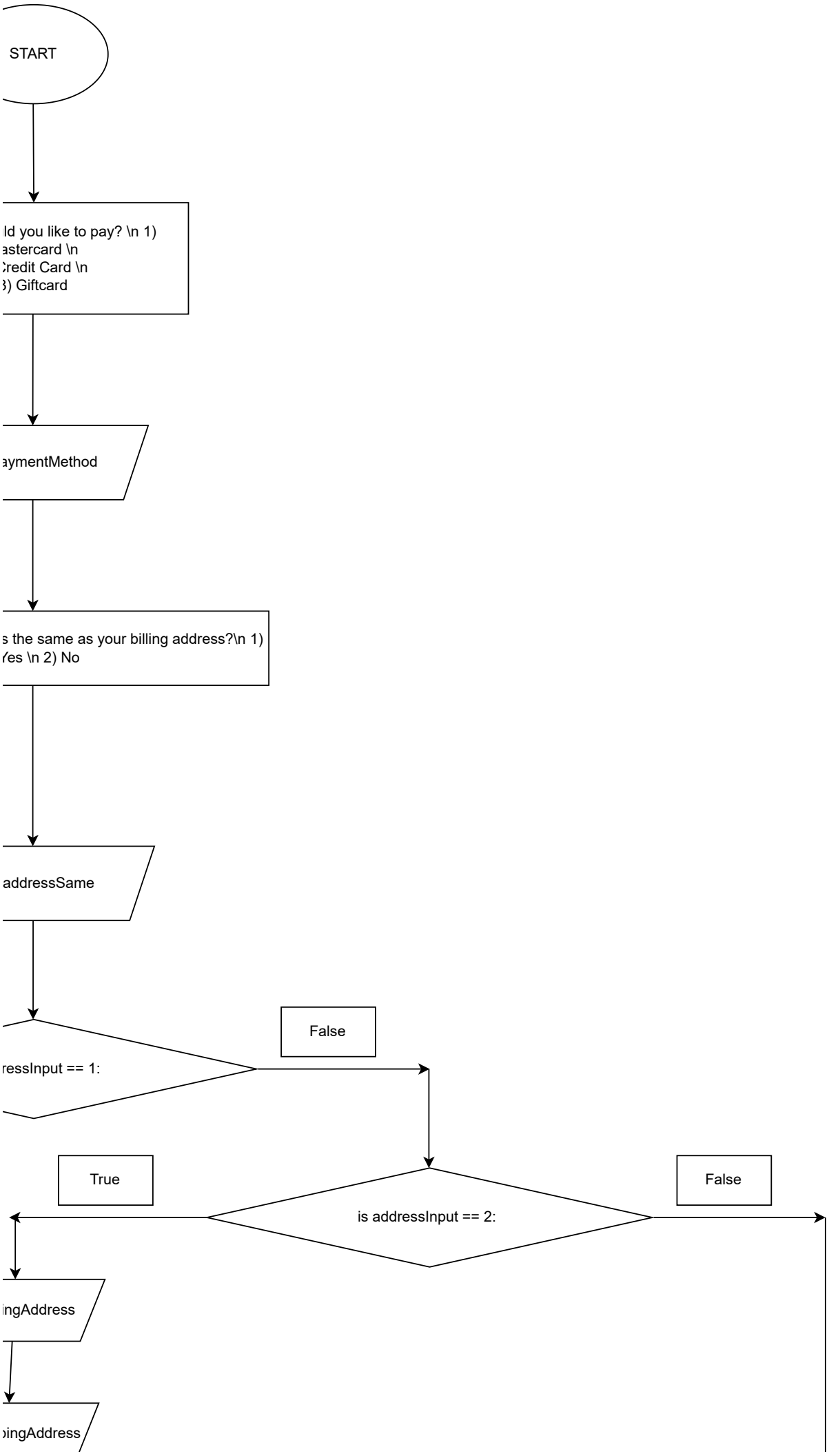

START
print("Would you like to continue shopping? \n 1) Would you like to continue? 2) Checkout?")
read checkoutOrContinueInput
while answerInput != 2
True
False
finalShoppingCart = []
read productItemNumber
read quantityOfItems
(pencils[itemNumber - 1])
("$", pencils[itemNumber - 1][2] * quantity)
productsPrice = pencils[itemNumber - 1][2] * quantity
quantity = str(quantity)
productsPrice = resultsOfStoredItemList[itemNumber - 1][2] * quantity
del resultsOfStoredItemList[itemNumber - 1][2]
resultsOfStoredItemList[itemNumber - 1].insert(2, productsPrice)

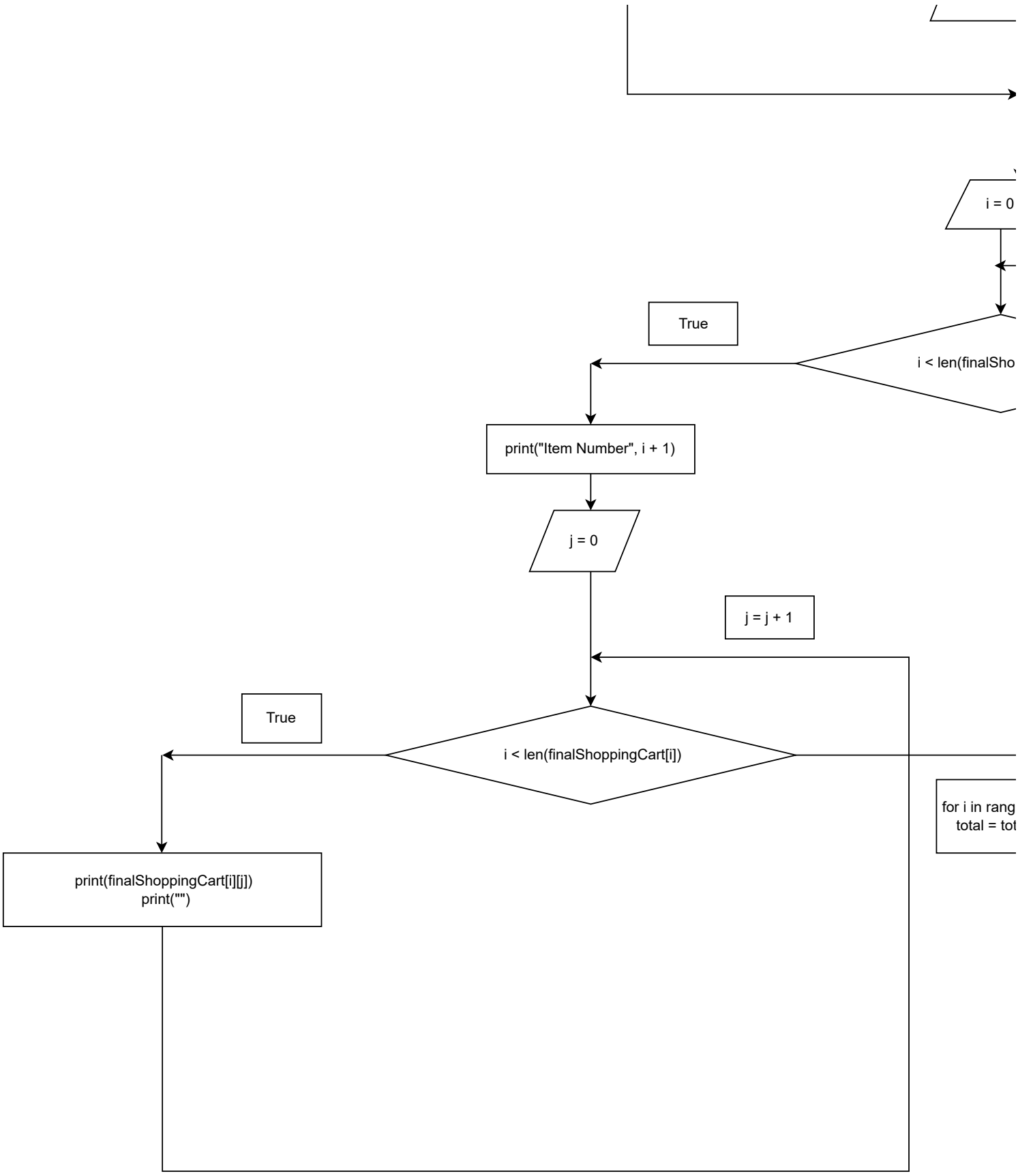

checkout()
END
searchingAndSorting ()

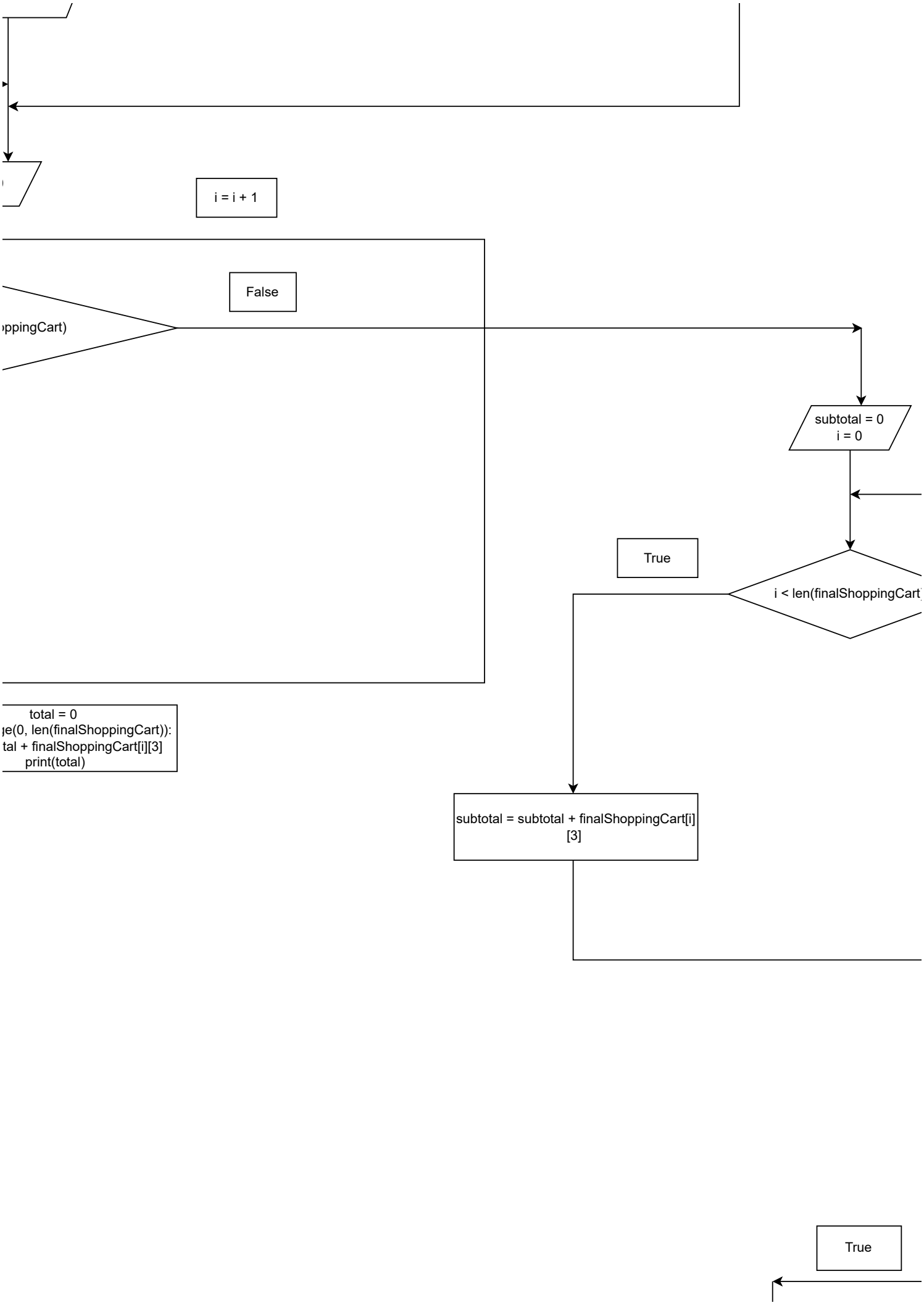
```
pencils[itemNumber - 1].insert(0, quantity + " Quanity")
finalShoppingCart.append(pencils[itemNumber - 1])
```

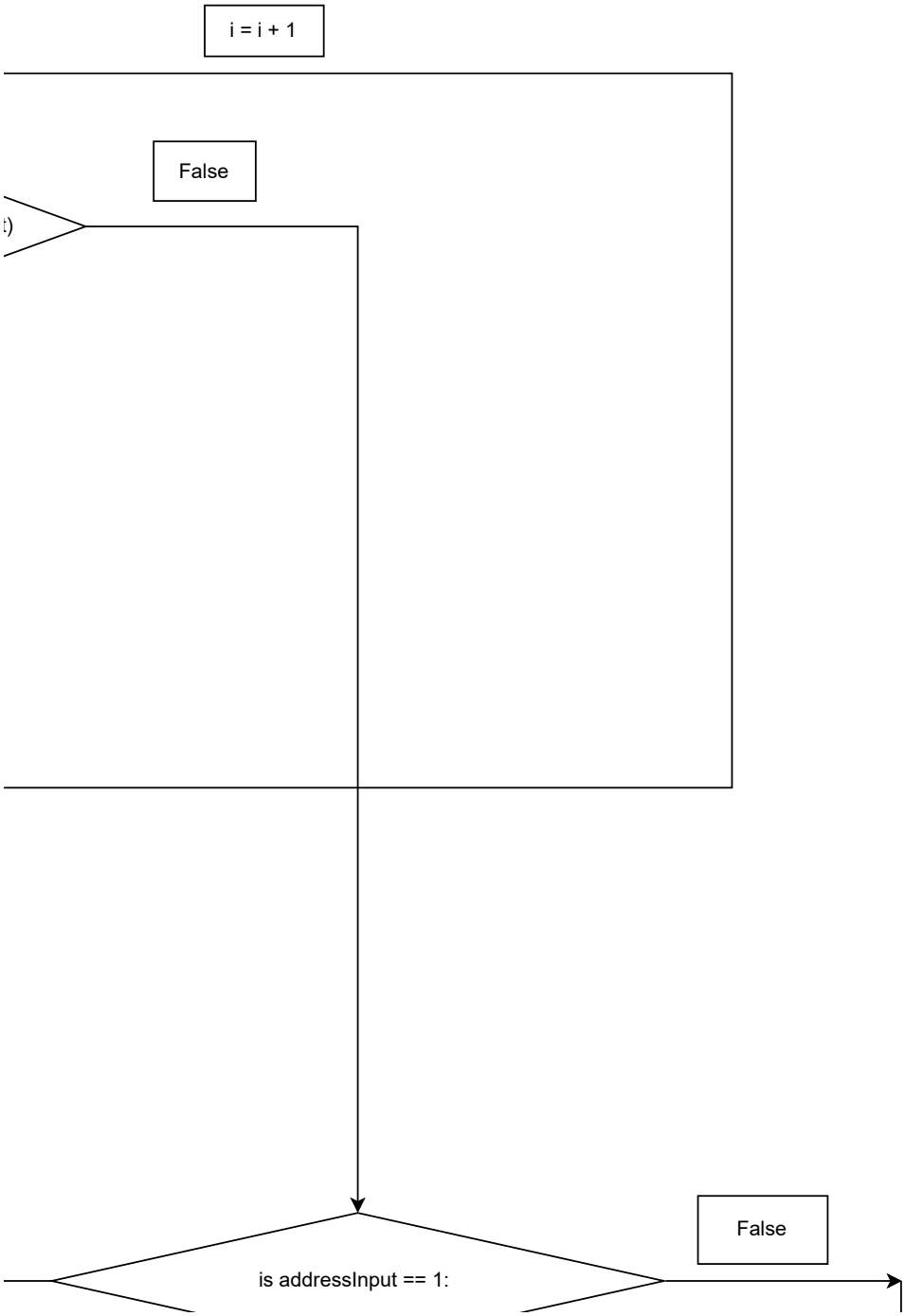

searchingAndSorting ()
resultsOfStoredItemList.clear()

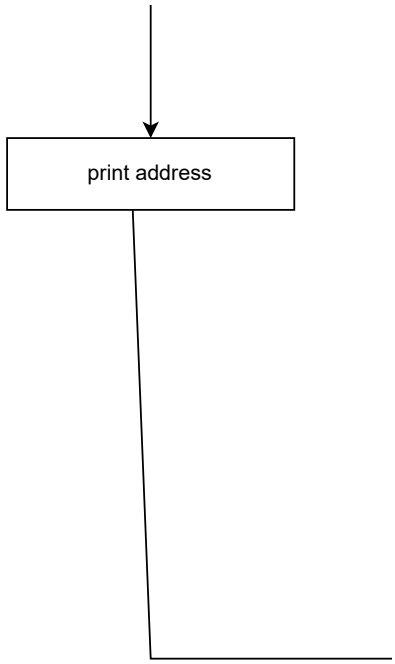

print How woul
Ma
2) C
3
read pa
print is your shipping address
Y
read a
True
is addr
read address
read billi
read shipp

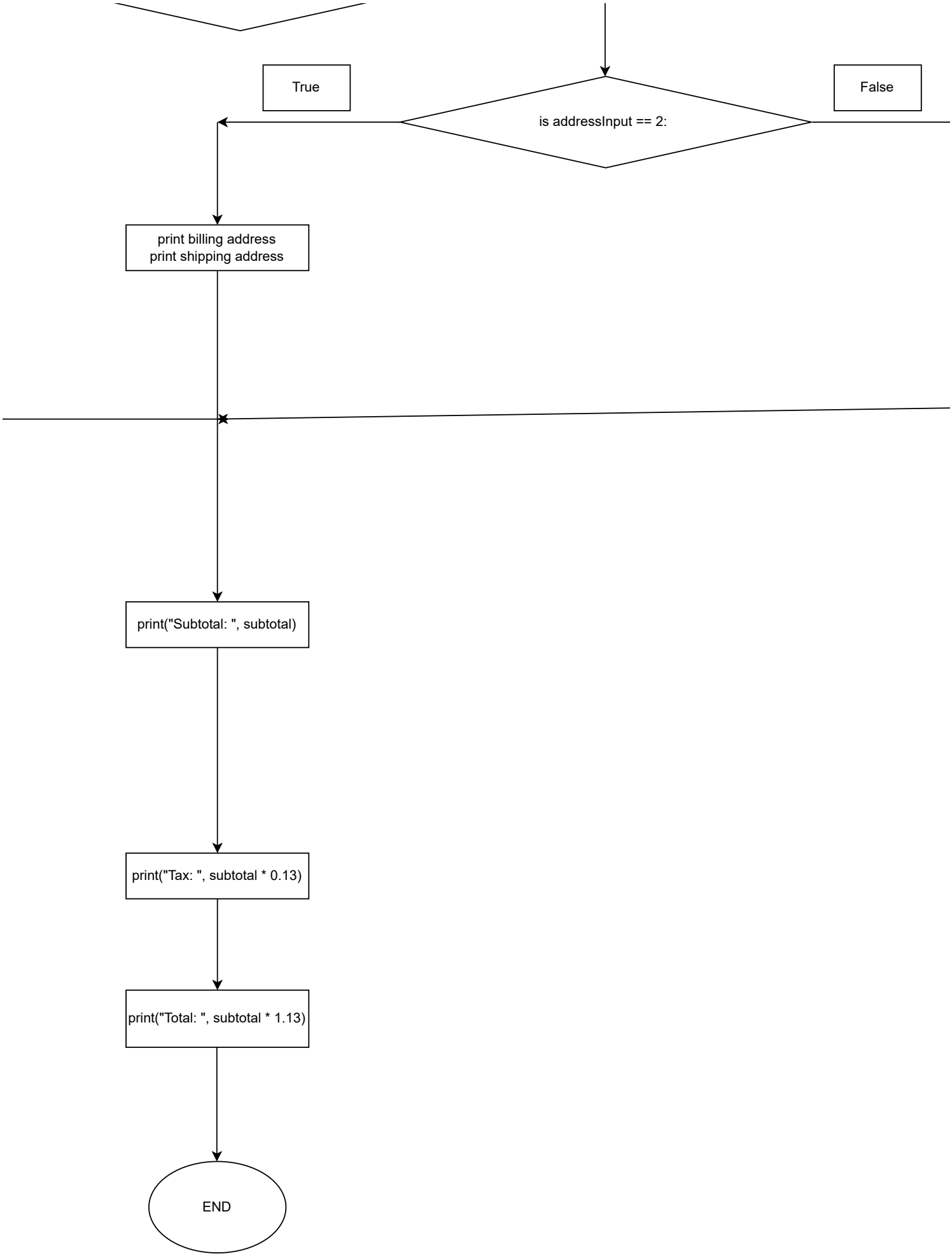
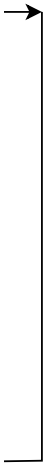

START
ld you like to pay? \n 1)
astercard \n
redit Card \n
) Giftcard
aymentMethod
s the same as your billing address?\n 1)
es \n 2) No
addressSame
ressInput == 1:
False
True
is addressInput == 2:
False
ingAddress
ingAddress


i = 0
True
i < len(finalSho
print("Item Number", i + 1)
j = 0
j = j + 1
True
i < len(finalShoppingCart[i])
for i in rang
total = tot
print(finalShoppingCart[i][j])
print("")


i = i + 1
False
ppingCart)
subtotal = 0
i = 0
True
i < len(finalShoppingCart)
total = 0
ge(0, len(finalShoppingCart)):
tal + finalShoppingCart[i][3]
print(total)
subtotal = subtotal + finalShoppingCart[i]
[3]
True


i = i + 1
False
is addressInput == 1:
False


print address


True
is addressInput == 2:
False
print billing address
print shipping address
print("Subtotal: ", subtotal)
print("Tax: ", subtotal * 0.13)
print("Total: ", subtotal * 1.13)
END