

By: Ahmad Sohail (64011748)

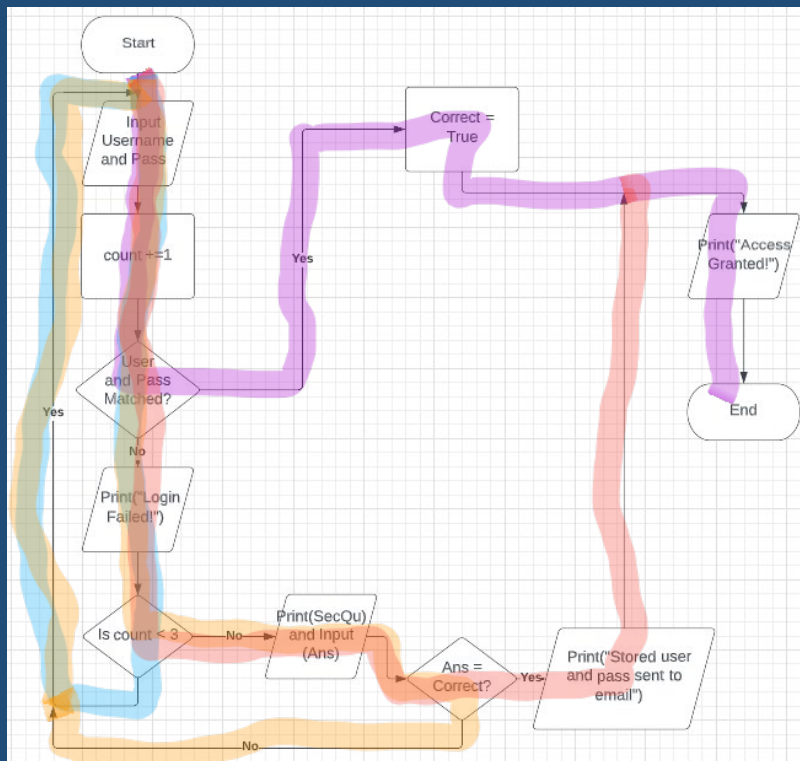
Question 1:

```
DECLARE User, Pass As String
DECLARE StoredName As String = ("achmed")
DECLARE StoredPass As String = ("123")
DECLARE Correct As Boolean = False
DECLARE count As Integer = 0
DECLARE Ans As Char
DECLARE SecQue = ("Are you Mr. Ackerman?")

WHILE Correct = True Or Ans = "Y"

    WHILE (Correct = True) Or (count >= 3)
        IF count < 3 THEN
            OUTPUT("Enter Username: ")
            User = INPUT
            OUTPUT("Enter Password: ")
            Pass = INPUT
            count += 1
            IF (User = StoredName) And (Pass = StoredPass) THEN
                OUTPUT("Access Granted!")
                Correct = True
            ELSE
                OUTPUT("Login Failed")
            ENDIF
        ENDIF
    ENDWHILE

    IF Correct = False THEN
        OUTPUT(SecQue & " Ans = 'Yes/No' only: ")
        Ans = INPUT
        IF Ans = ("Y") THEN
            OUTPUT("Access Granted!")
            OUTPUT("Your username: " & StoredName & " & Your password: " & StoredPass)
            OUTPUT("Successfully sent details to Email!")
        ELSE
            count = 0
        ENDIF
    ENDIF
ENDWHILE
```



Test case	Inputs	Expected results	Coverage
Username and password matched first time	Achmed 123	Access granted	Purple
Username and password matched within 3 tries	Tor Ohm 546 786	Login failed both times, but still given option to login until 3 rd time	Blue
Secret Question's answer given correctly	Y	Access Granted, Stored Password and username sent to email	Red
Secret Question's answer given incorrectly	N	Login failed	Orange

Question 2:

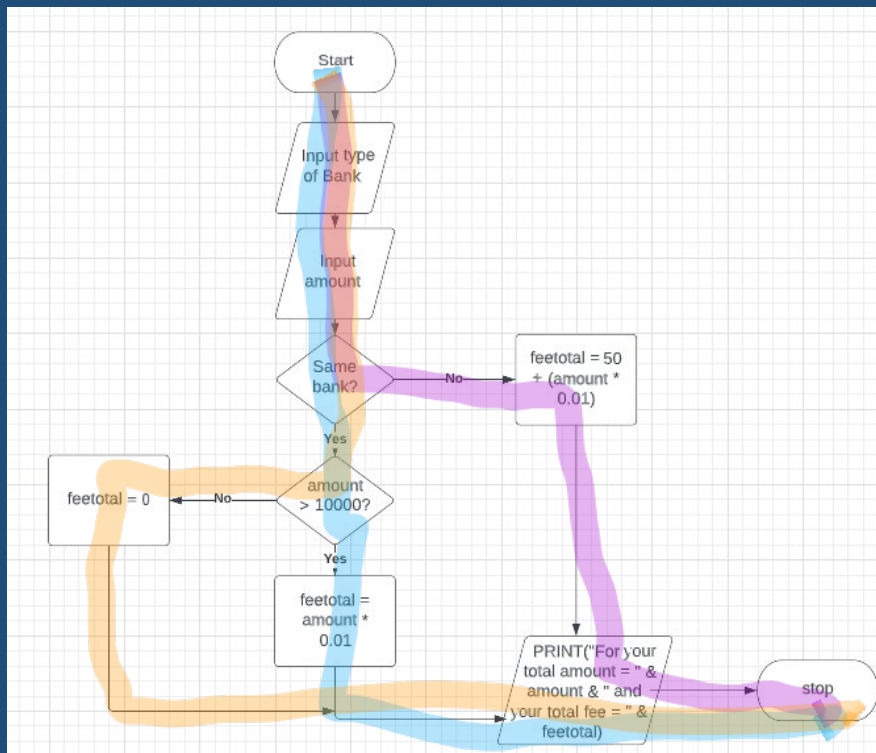
```

DECLARE bank As String
DECLARE amount, feetotal As Double

    WHILE bank <> ("same") Or bank <> ("dIFferent")
        PRINT("enter bank type: 'same' OR 'dIFferent' only")
        bank = INPUT
    ENDWHILE
PRINT("enter amount: ")
amount = INPUT
IF bank = ("same") THEN
    IF amount > 10000 THEN
        feetotal = amount * 0.01
    ELSE feetotal = 0
    ENDIF

ELSE
    feetotal = 50 + (amount * 0.01)
ENDIF
PRINT("For your total amount = " & amount & " and your total fee = " & feetotal)

```



Test case	Inputs	Expected results	Coverage
Different bank	14000	14000 and 190 fee	Purple
Same Bank but amount > 10000	16000	16000 and 160 fee	Blue
Same bank but with amount < 10000	9999	9999 and 0 fee	Orange

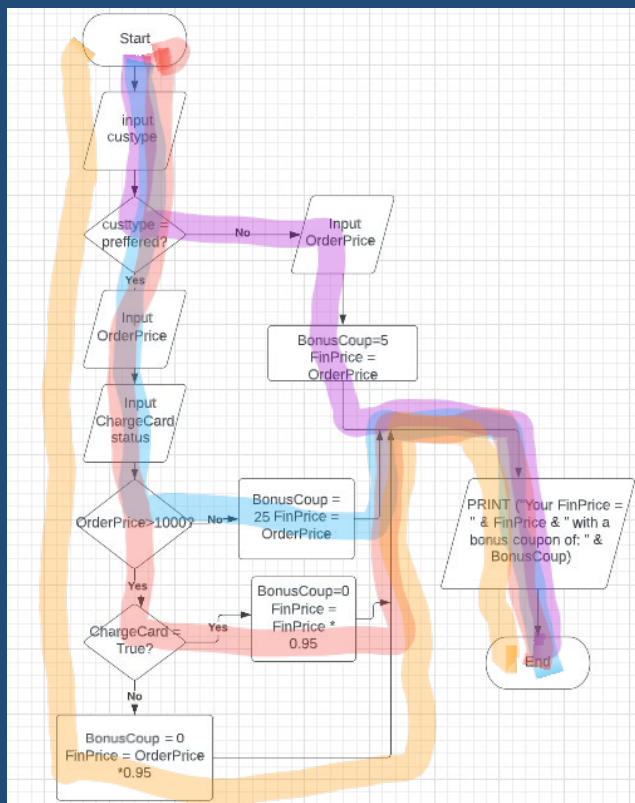
Question 3:

```

DECLARE CustType As String
DECLARE ChargeCard As Boolean
DECLARE OrderPrice, TotDis, BonusCoup, FinPrice As Double
DECLARE Ans As String

PRINT("Enter the type of customer you are: 'preffered' OR 'regular'")
CustType = INPUT
IF CustType = ("preffered") THEN
    PRINT("Enter the price of items that you ordered (Total): ")
    OrderPrice = INPUT
    PRINT("Did you use a charge card: (Y/N) only ")
    Ans = INPUT
    IF Ans = ("Y") THEN
        ChargeCard = TRUE
    ELSEIF Ans = ("N") THEN
        ChargeCard = FALSE
    ENDIF
    IF OrderPrice > 1000 THEN
        BonusCoup = 0
        FinPrice = OrderPrice * 0.95
        IF ChargeCard = TRUE THEN
            FinPrice = FinPrice * 0.95
        ENDIF
    ELSEIF 0 < OrderPrice <= 1000 THEN
        BonusCoup = 25
        FinPrice = OrderPrice
        TotDis = 0
    ENDIF
ELSE
    PRINT("Enter the price of items that you ordered (Total): ")
    OrderPrice = INPUT
    BonusCoup = 5
    TotDis = 0
    FinPrice = OrderPrice
ENDIF
PRINT("Your FinPrice = " & FinPrice & " with a bonus coupon of: " & BonusCoup)

```



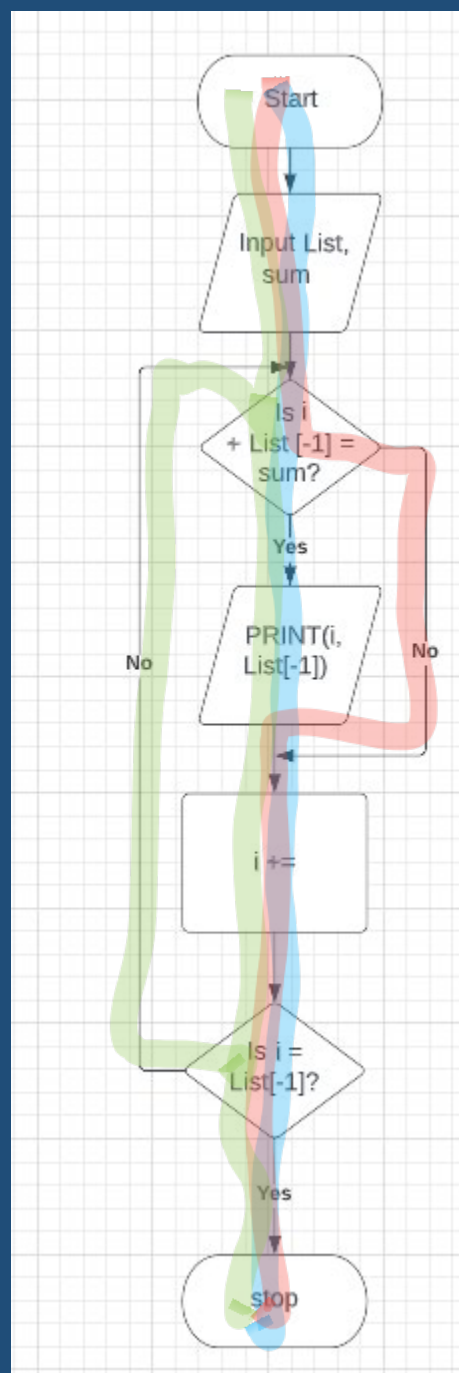
Test case	Inputs	Expected results	Coverage
Regular customer	1300	Fin price = 1300 with bonus coupon = 5	Purple
Preferred but order price < 1000	999	Fin price = 999 with bonus coupon = 25	Blue
Preferred and order price > 1000 and charge card	1001	Fin price with discount = 903.4025 with bonus coupon = 0	Red
Preferred and order price > 1000 but no charge card	1200	Fin price with discount 1140 with bonus coupon = 0	orange

Question 4:

```

INPUT G_list
INPUT sum
FOR i in G_list (except G_list[-1])
    if i + G_list[-1] = sum
        PRINT(list(i, G_list[-1]))
NEXT i

```



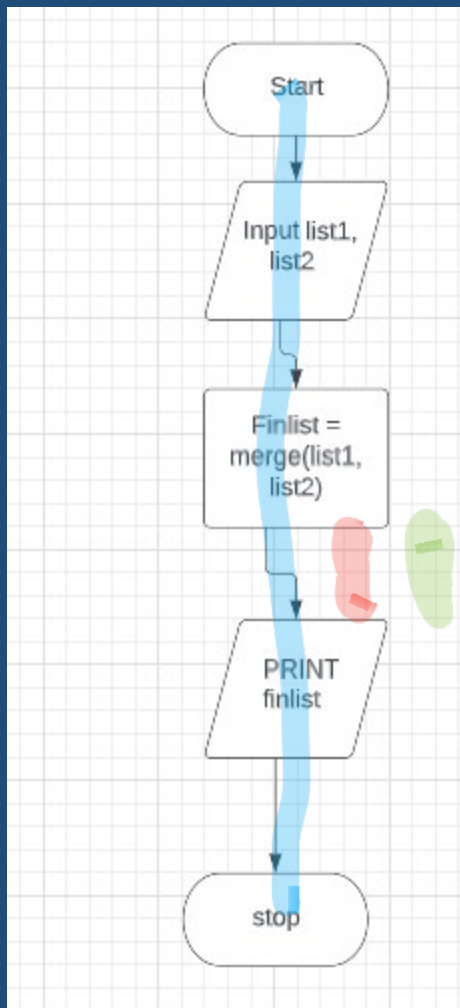
Test case	Inputs	Expected results	Coverage
More than 1 pair in given list for sum and pair found first time	[1,2,3,4,5] Sum = 6	[1,5], [2,4]	Blue
Pair <u>not found</u> the first time	[0,2,3,4,5] Sum = 6	[2,4]	Red
Longer list which may contain more elements to search from	[1,2,3,4,5,6, <u>7</u> ,-1,-2] Sum = 6	[1,5],[2,4],[6,-1],[7,-2]	Green

Question 5

```

INPUT list1, list2
List3 = merge(list1 + list2)
FinList = List3
Print FinList

```



Test case	Inputs	Expected results	Coverage
List1 is same length as list2	[1,2,3] <u>[a,b,c]</u>	[<u>1</u> ,a,2,b,3,c]	Blue
List 1 > list2	[1,2,3,4] <u>[a,b,c]</u>	[<u>1</u> ,a,2,b,3,c,4]	Red
List2 > list1	[1,2,3] <u>[a,b,c,d]</u>	[<u>1</u> ,a,2,b,3,c,d]	Green