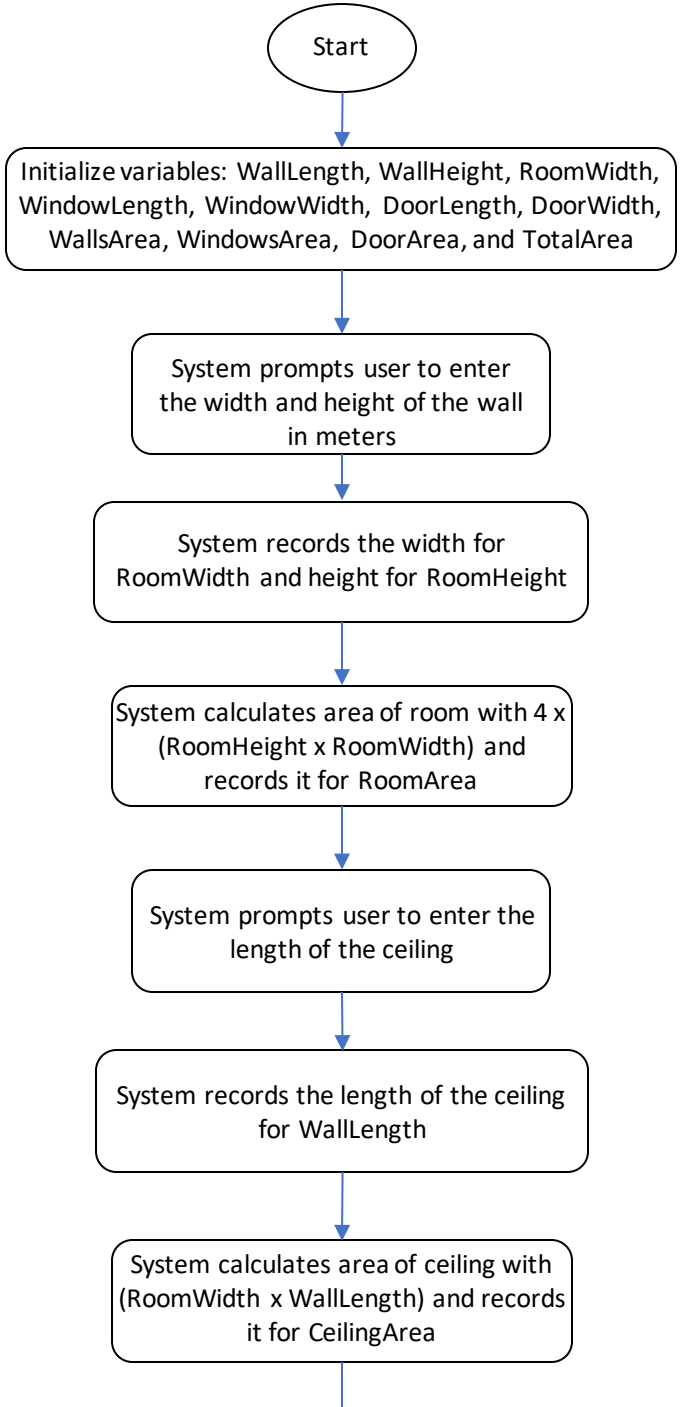
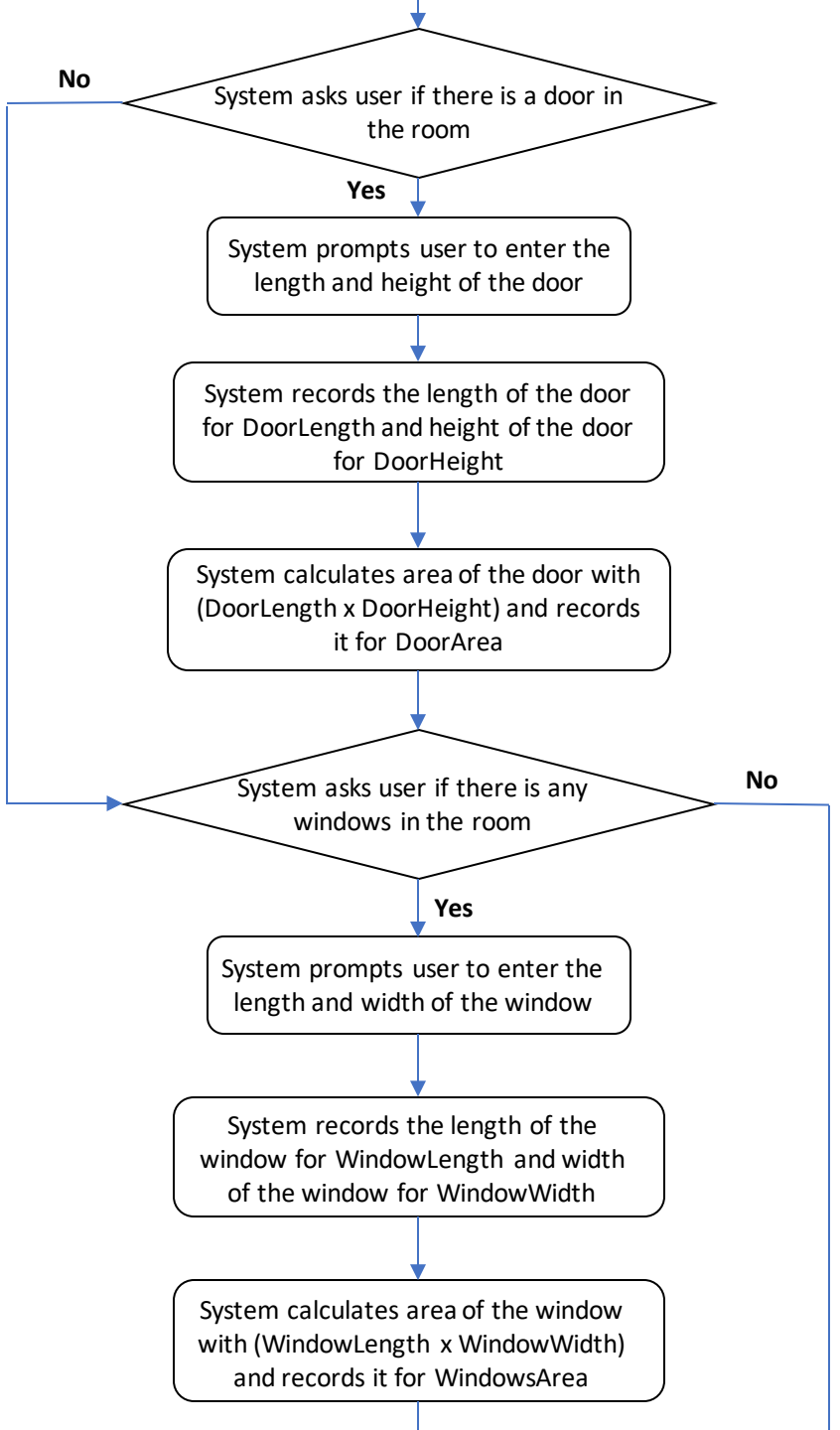
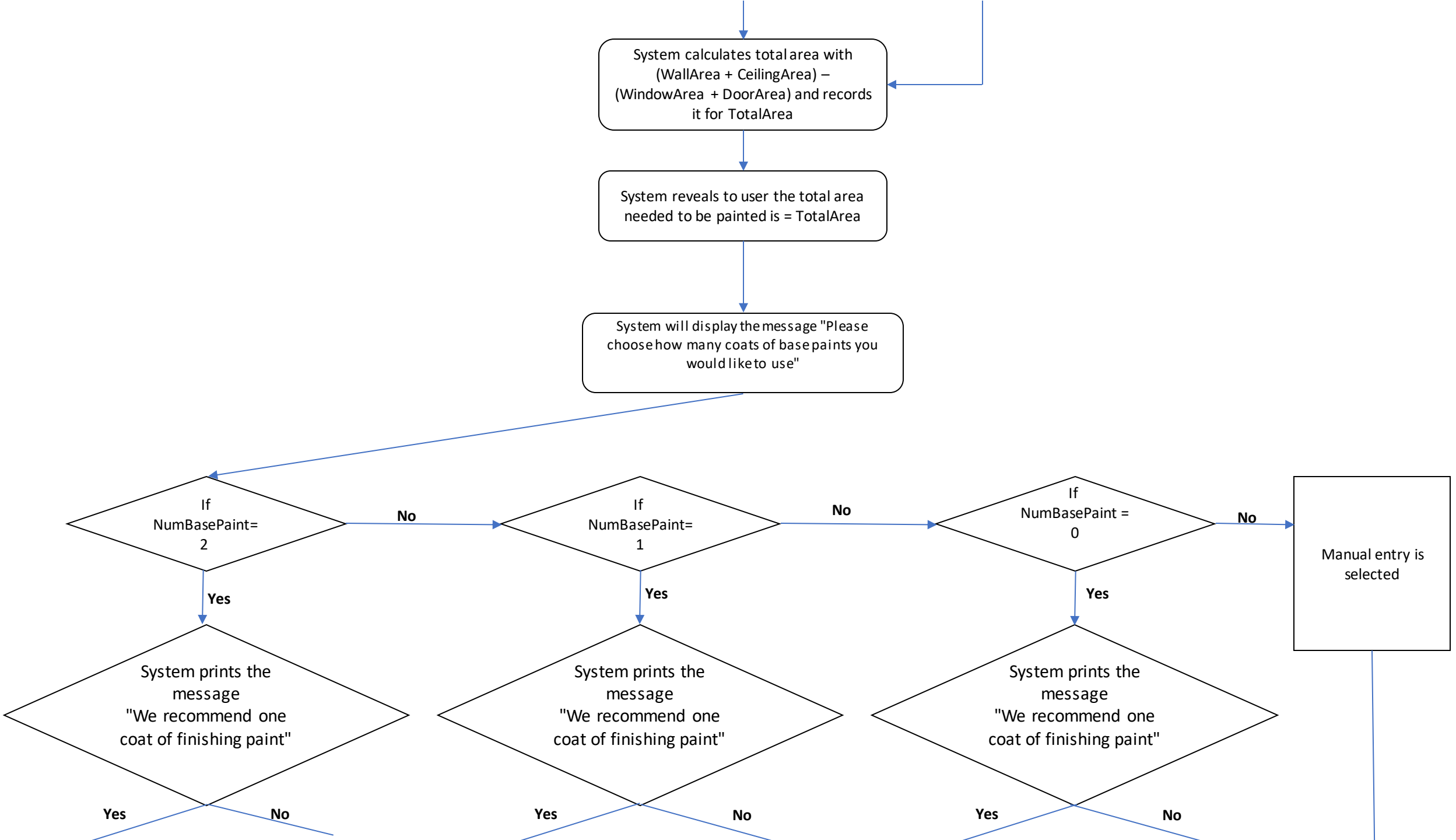
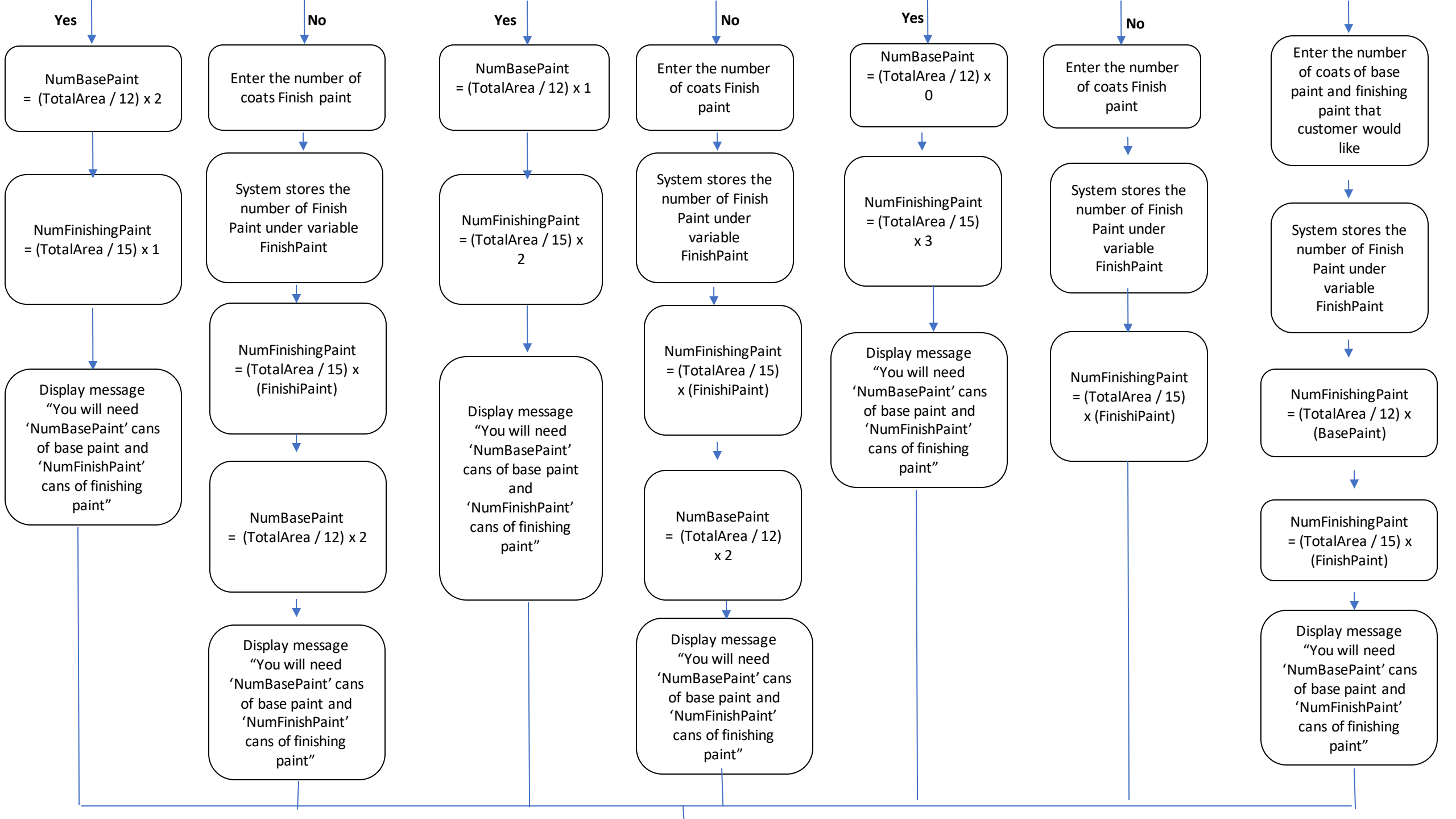
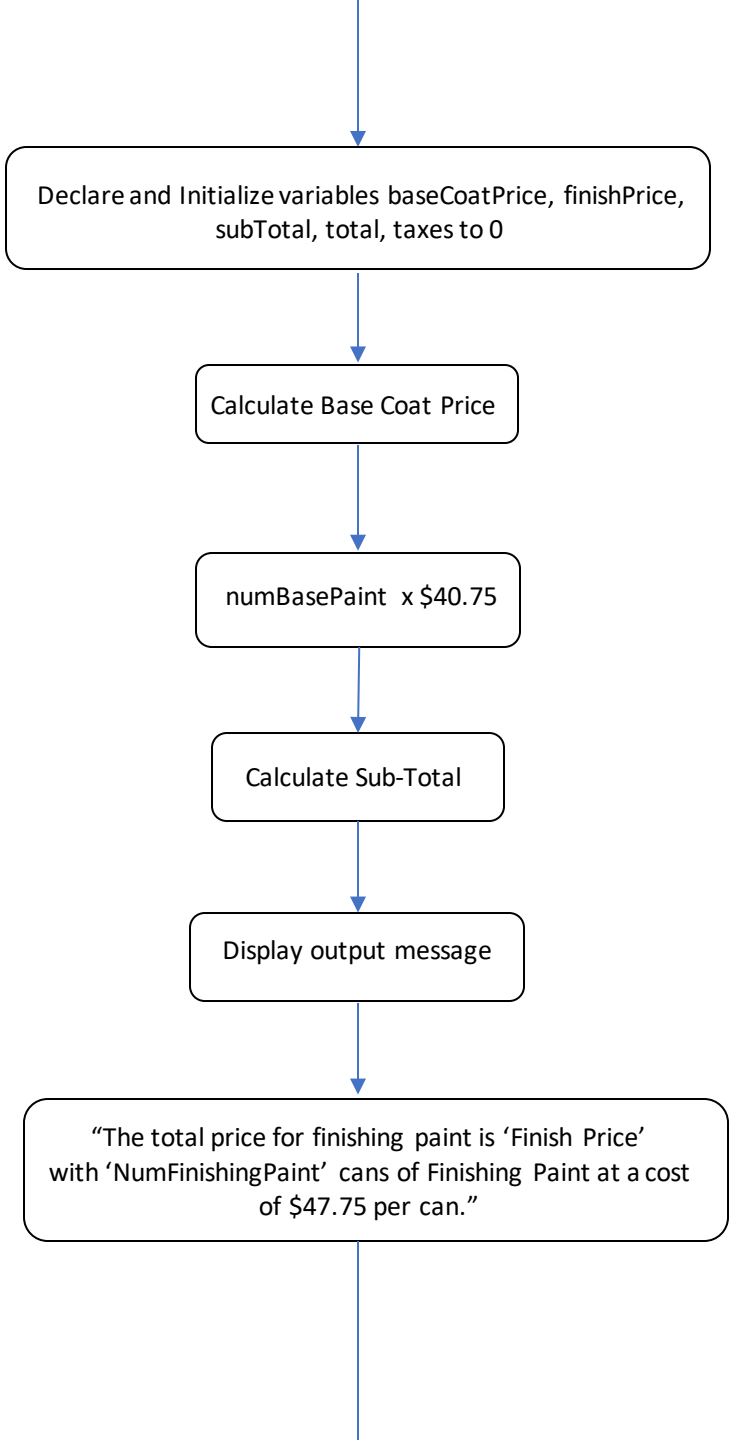
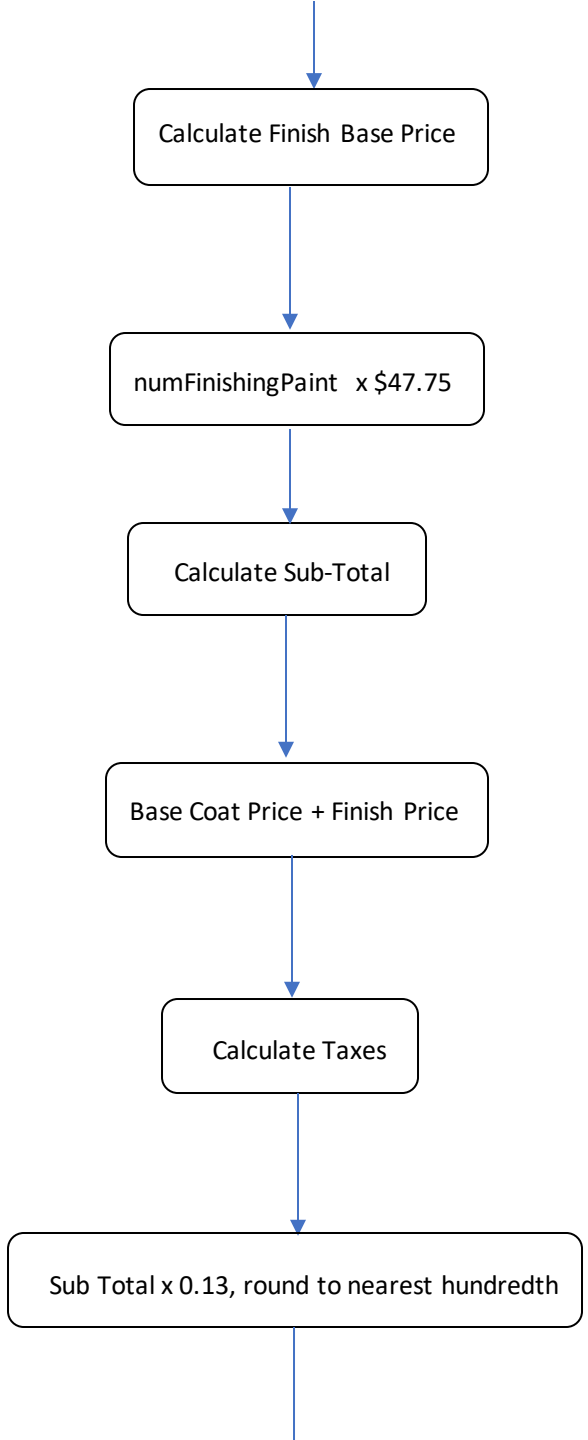

Start
Initialize variables: WallLength, WallHeight, RoomWidth, WindowLength, WindowWidth, DoorLength, DoorWidth, WallsArea, WindowsArea, DoorArea, and TotalArea
System prompts user to enter the width and height of the wall in meters
System records the width for RoomWidth and height for RoomHeight
System calculates area of room with 4 x (RoomHeight x RoomWidth) and records it for RoomArea
System prompts user to enter the length of the ceiling
System records the length of the ceiling for WallLength
System calculates area of ceiling with (RoomWidth x WallLength) and records it for CeilingArea

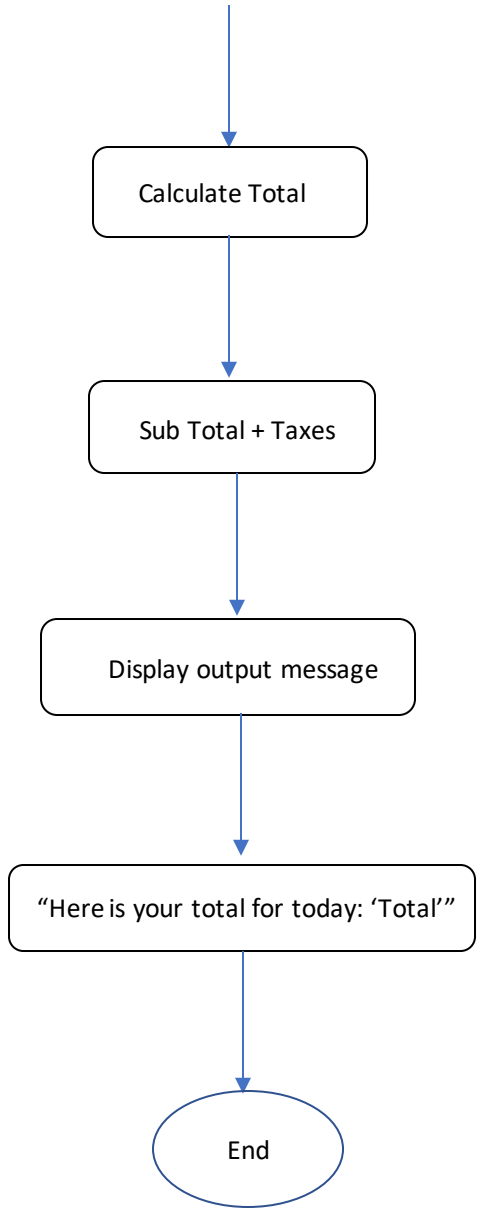

No
System asks user if there is a door in the room
Yes
System prompts user to enter the length and height of the door
System records the length of the door for DoorLength and height of the door for DoorHeight
System calculates area of the door with (DoorLength x DoorHeight) and records it for DoorArea
System asks user if there is any windows in the room
No
Yes
System prompts user to enter the length and width of the window
System records the length of the window for WindowLength and width of the window for WindowWidth
System calculates area of the window with (WindowLength x WindowWidth) and records it for WindowsArea


System calculates total area with (WallArea + CeilingArea) – (WindowArea + DoorArea) and records it for TotalArea
System reveals to user the total area needed to be painted is = TotalArea
System will display the message "Please choose how many coats of base paints you would like to use"
If NumBasePaint= 2
No
If NumBasePaint= 1
No
If NumBasePaint = 0
No
Manual entry is selected
Yes
Yes
Yes
System prints the message "We recommend one coat of finishing paint"
System prints the message "We recommend one coat of finishing paint"
System prints the message "We recommend one coat of finishing paint"
Yes
No
Yes
No
Yes
No


Yes
NumBasePaint = (TotalArea / 12) x 2
NumFinishingPaint = (TotalArea / 15) x 1
Display message "You will need 'NumBasePaint' cans of base paint and 'NumFinishPaint' cans of finishing paint"
No
Enter the number of coats Finish paint
System stores the number of Finish Paint under variable FinishPaint
NumFinishingPaint = (TotalArea / 15) x (FinishiPaint)
NumBasePaint = (TotalArea / 12) x 2
Display message "You will need 'NumBasePaint' cans of base paint and 'NumFinishPaint' cans of finishing paint"
Yes
NumBasePaint = (TotalArea / 12) x 1
NumFinishingPaint = (TotalArea / 15) x 2
Display message "You will need 'NumBasePaint' cans of base paint and 'NumFinishPaint' cans of finishing paint"
No
Enter the number of coats Finish paint
System stores the number of Finish Paint under variable FinishPaint
NumFinishingPaint = (TotalArea / 15) x (FinishiPaint)
NumBasePaint = (TotalArea / 12) x 2
Display message "You will need 'NumBasePaint' cans of base paint and 'NumFinishPaint' cans of finishing paint"
Yes
NumBasePaint = (TotalArea / 12) x 0
NumFinishingPaint = (TotalArea / 15) x 3
Display message "You will need 'NumBasePaint' cans of base paint and 'NumFinishPaint' cans of finishing paint"
No
Enter the number of coats Finish paint
System stores the number of Finish Paint under variable FinishPaint
NumFinishingPaint = (TotalArea / 15) x (FinishiPaint)
Enter the number of coats of base paint and finishing paint that customer would like
System stores the number of Finish Paint under variable FinishPaint
NumFinishingPaint = (TotalArea / 12) x (BasePaint)
NumFinishingPaint = (TotalArea / 15) x (FinishPaint)
Display message "You will need 'NumBasePaint' cans of base paint and 'NumFinishPaint' cans of finishing paint"


Declare and Initialize variables baseCoatPrice, finishPrice, subTotal, total, taxes to 0
Calculate Base Coat Price
numBasePaint x $40.75
Calculate Sub-Total
Display output message
“The total price for finishing paint is ‘Finish Price’ with ‘NumFinishingPaint’ cans of Finishing Paint at a cost of $47.75 per can.”


Calculate Finish Base Price
numFinishingPaint x $47.75
Calculate Sub-Total
Base Coat Price + Finish Price
Calculate Taxes
Sub Total x 0.13, round to nearest hundredth


Calculate Total
Sub Total + Taxes
Display output message
“Here is your total for today: ‘Total’”
End

0.Start

1. Initialize variables WallLength, WallHeight, RoomWidth, WindowLength , WindowWidth,Door Length,DoorWidth, WallsArea, CeilingArea, WindowArea, DoorArea, RoomArea, paintArea, NumBasePaint = 0, NumFinishingPaint = 0, Base Coat Price = 0, NumBaseCoat = 0 , NumFinishingCoat = 0, Finish Price = 0 Sub-Total=0, Total=0, Taxes = 0, BaseCoat = 0, FinishCoat = 0
2. System displays the message “Please enter the width of the wall and the height of the wall in meters”
3. System stores the width in variable RoomWidth and stores the height in variable RoomHeight
4. System calculates area of the room with 4 x (RoomHeight x RoomWidth) and stores it under variable RoomArea
5. System displays the message “Please enter the length of the ceiling”
6. System stores the length of the ceiling under variable WallLength
7. System calculates the area of the ceiling with (RoomWidth x WallLength) and stores it under variable CeilingArea
8. System displays the message “Is there a door in this room?”
    a. Yes
        i) System displays the message “Please enter the length of the door and the height of the door
        ii) System stores the length of the door under variable DoorLength and stores the height of the door under variable DoorHeight
        iii) System calculates the area of the door by (DoorLength x DoorHeight) and stores it under variable DoorArea
    b. No
        i) Go go step 9
9. System displays the message “Is there any windows in this room?”
    a. Yes
        i) System displays the message “Please enter the length of the window and the width of the window”
        ii) System stores the length of the window under variable WindowLength and stores the width of the window under variable WindowWidth
        iii) System calculates the area of the window by (WindowLength x WindowWidth) and stores it under variable WindowArea
    b. No
        i) Go to step 10

10. System calculates total area by
(WallArea+ CeilingArea) - (WindowArea + DoorArea) and stores it under variable Total Area

11. System displays the message
“The total area needed to be painted today is ‘TotalArea’”

12. System displays the message “Please choose how many coats of base paints you would like to use”

a) If two is selected
    i) System displays the message “We recommend one coats of Finishing Paint”
        a) Yes
            i) System calculates number of base paint needed by (TotalArea / 12) x 2 rounded to the nearest whole number and stores it under variable NumBasePaint
            ii) System calculates number of Finishing Paint needed by (TotalArea / 15) x 1 rounded to the nearest whole number and stores it under variable NumFinishingPaint
            iii) System displays the message “You will need ‘NumBasePaint’ cans of base paint and ‘NumFinishingPaint’ cans of finishing paint”

        b) No
            i) System prints the message “Enter the number of coats of Finish paint”
            ii) System stores the number of Finish Paint under variable FinishPaint
            iii) System calculates the number of Finishing Paint needed by (TotalArea / 15) x (FinishPaint) rounded to the nearest whole number and stores it under variable NumFinishingPaint
            iv) System calculates the number of Base Paint needed by (TotalArea / 12) x 2 rounded to the nearest whole number and store it under variable NumBasePaint
            iv) System displays the message “You will need ‘NumBasePaint’ cans of base paint and ‘NumFinishingPaint’ cans of finishing paint

b) If one is selected
    i) System displays the message “We recommend two coats of Finishing Paint”
        c) Yes
            i) System calculates number of base paint needed by (TotalArea / 12) x 1 rounded to the nearest whole number and stores it under variable NumBasePaint
            ii) System calculates number of Finishing Paint needed by (TotalArea / 15) x 2 rounded to the nearest whole number and stores it under variable NumFinishingPaint
            iii) System displays the message “You will need ‘NumBasePaint’ cans of base paint and ‘NumFinishingPaint’ cans of finishing paint”

d) No
i) System prints the message “Enter the number of coats Finish paint”
ii) System stores the number of Finish Paint under variable FinishPaint
iii) System calculates the number of Finishing Paint needed by (TotalArea / 15) x (FinishPaint) rounded to the nearest whole number and stores it under variable NumFinishingPaint
iv) System calculates the number of Base Paint needed by (TotalArea / 12) x 1 rounded to the nearest whole number and store it under variable NumBasePaint
iv) System displays the message “You will need ‘NumBasePaint’ cans of base paint and ‘NumFinishingPaint’ cans of finishing paint

c) If zero is selected
i) System displays the message “We recommend three coats of Finishing Paint”
e) Yes
i) System calculates number of Finishing Paint needed by (TotalArea / 15) x 3 rounded to the nearest whole number and stores it under variable NumFinishingPaint
ii) System displays the message “You will need ‘NumFinishingPaint’ cans of finishing paint”

f) No
i) System prints the message “Enter the number of Finish paint”
ii) System stores the number of Finish Paint under variable FinishPaint
iii) System calculates the number of Finishing Paint needed by (TotalArea / 15) x (FinishPaint) rounded to the nearest whole number and stores it under variable NumFinishingPaint
iv) System displays the message “You will need ‘NumFinishingPaint’ cans of finishing paint

d) If Manual entry is selected
i) System displays the message “Please enter the number of coats of base paint and finishing paint that you would like”
ii) System stores the number of base paint under variable BasePaint and stores the number of Finishing paint under variable FinishPaint
iii) System calculates the number of base paint needed by (TotalArea/12) x BasePaint rounded to the nearest whole number and stores it under variable NumBasePoint

iv) System calculates the number of finishing paint needed by (TotalArea/15) x FinishPaint rounded to the nearest whole number and stores it under variable NumBasePoint

v) System displays the message “You will need ‘NumBasePaint’ cans of base paint and ‘NumFinishingPaint’ cans of finishing paint”

13. System will calculate Base Coat Price = NumBasePaint x $40.75

14. System will print the message “The total price for base paint is ‘Base Coat Price’ with ‘NumBasePaint’ cans of Base Paint at a cost of $40.75 per can.”

15. System will calculate Finish Price = number of NumFinishingPaint x $47.75

16. 14. System will print the message “The total price for finishing paint is ‘Finish Price’ with ‘NumFinishingPaint’ cans of Finishing Paint at a cost of $47.75 per can.”

17. System will calculate Sub-Total = Base Coat Price + Finish Price

18. System will display a message “The total before taxes for today is ‘Sub-Total’

19. System will calculate Taxes = Sub Total x 0.13 and rounds to the nearest hundredth

20. System will calculate Total = Sub Total + Taxes

21. System will display a message “Here’s is your total after taxes for today ‘Total’”

22. End