Jerry Olds

Problem Statement

There needs to be a way to quickly define which rooms need what type of flooring and how much it will cost to floor that particular room.

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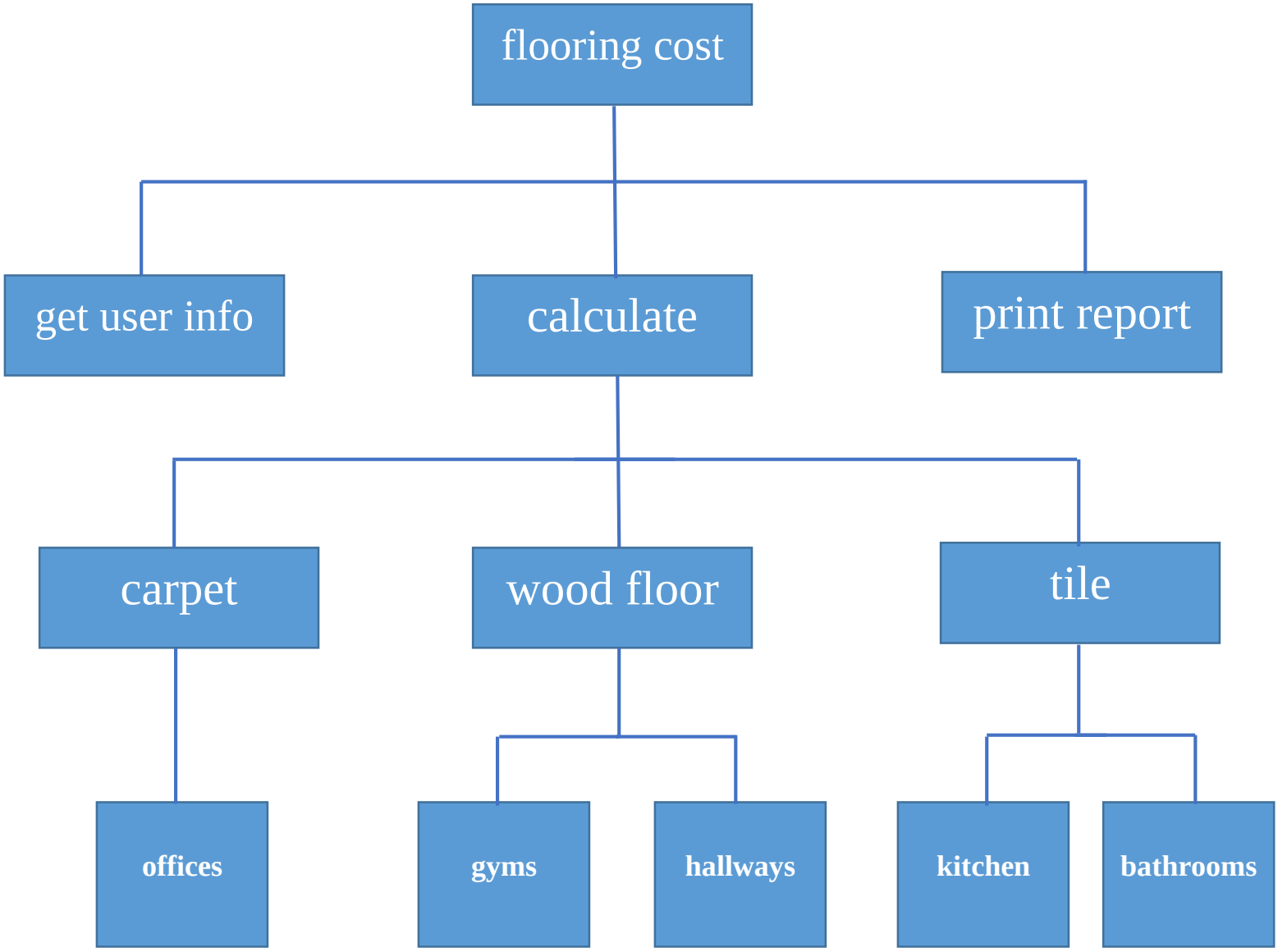
Structure Chart



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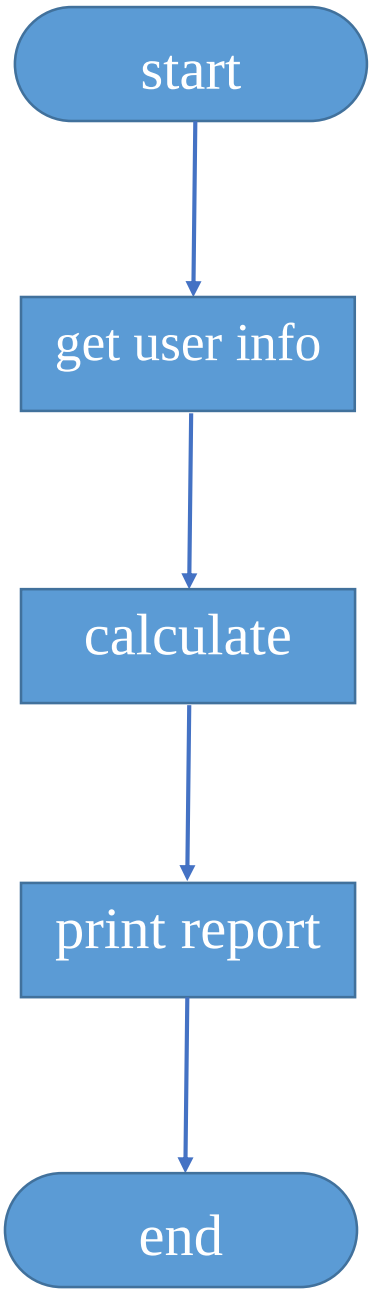
Flowchart for Flooring Cost



Pseudo-code

Start of algorithm for flooring cost

1. Get User Information
2. Calculate
3. Print Report

End of algorithm for flooring cost

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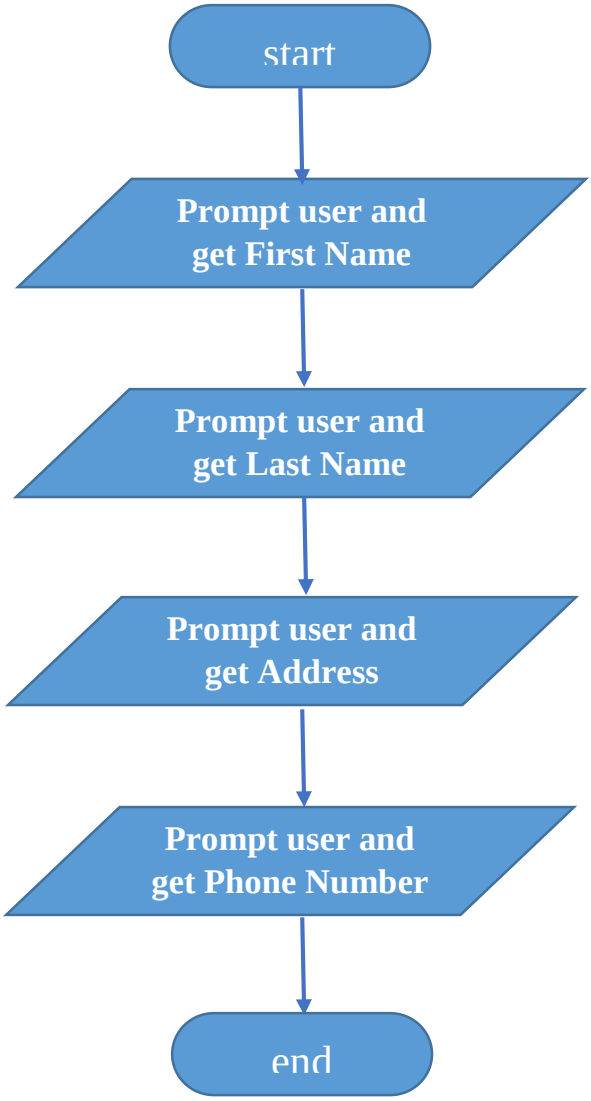
Flowchart Get User Info



Pseudo-code

Start of algorithm for get user info

1. Prompt user and get First Name
2. Prompt user and get Last Name
3. Prompt user and get Address
4. Prompt user and get Phone Number

End of algorithm for get user info

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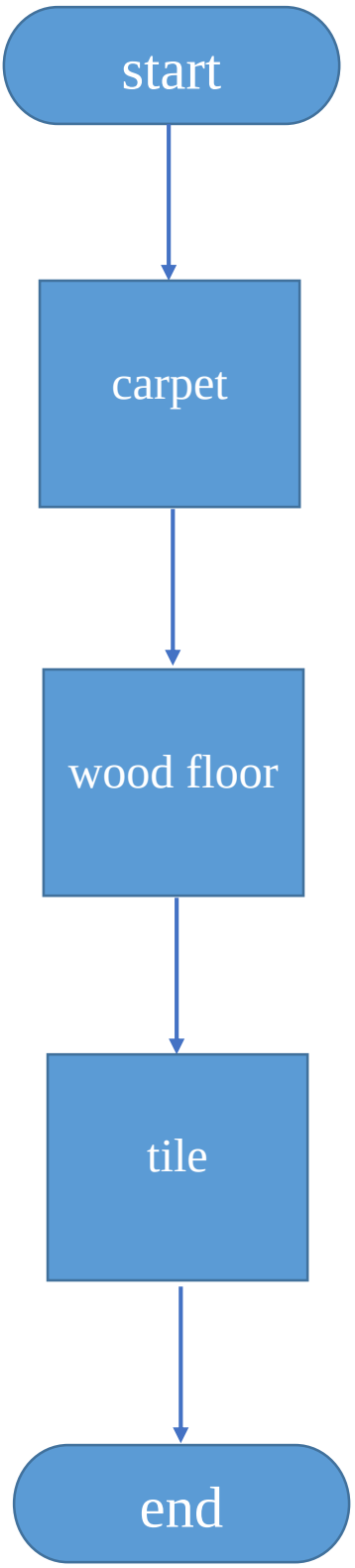
Flowchart calculate



Pseudo-code

Start of algorithm for calculate

1. Calculate carpet
2. Calculate wood floor
3. Calculate tile

End of algorithm for calculate

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Flowchart carpet

Pseudo-code

Start of algorithm for carpet
1. Calculate offices
End of algorithm for carpet

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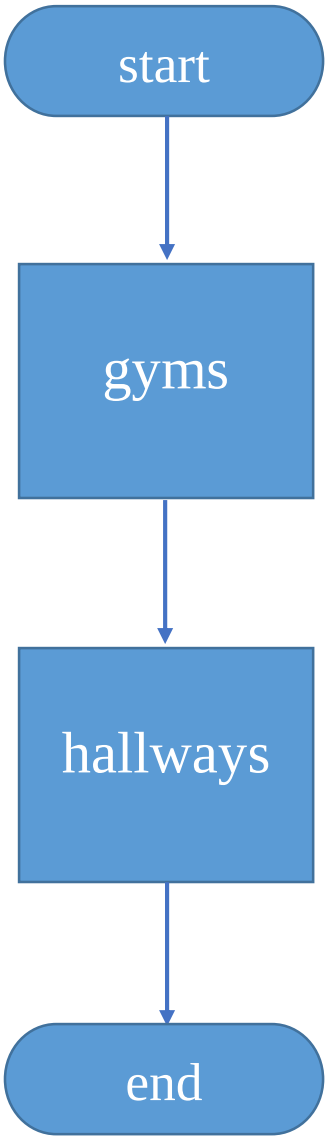
Flowchart wood floor



Pseudo-code

Start of algorithm for wood floor
1. Calculate gyms
2. Calculate hallways

End of algorithm for wood floor

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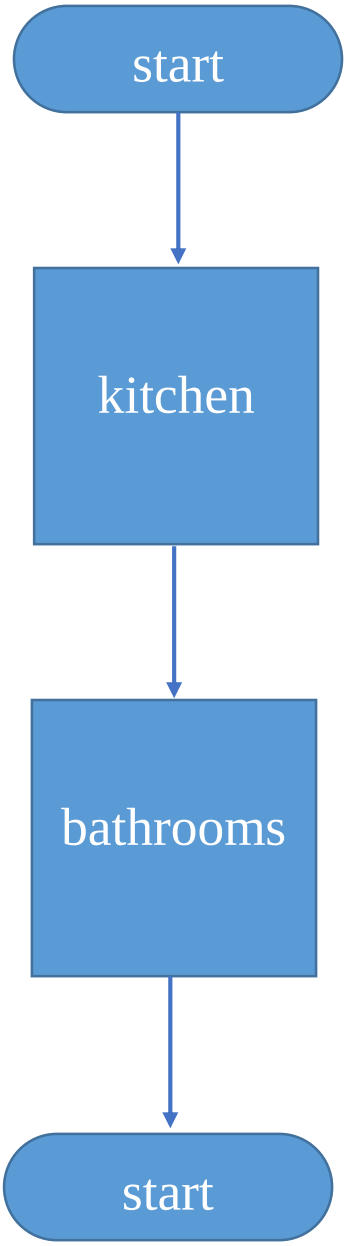
Flowchart tiles



Pseudo-code

Start algorithm for tiles
1. Calculate kitchen
2. Calculate bathrooms

End algorithm for tiles

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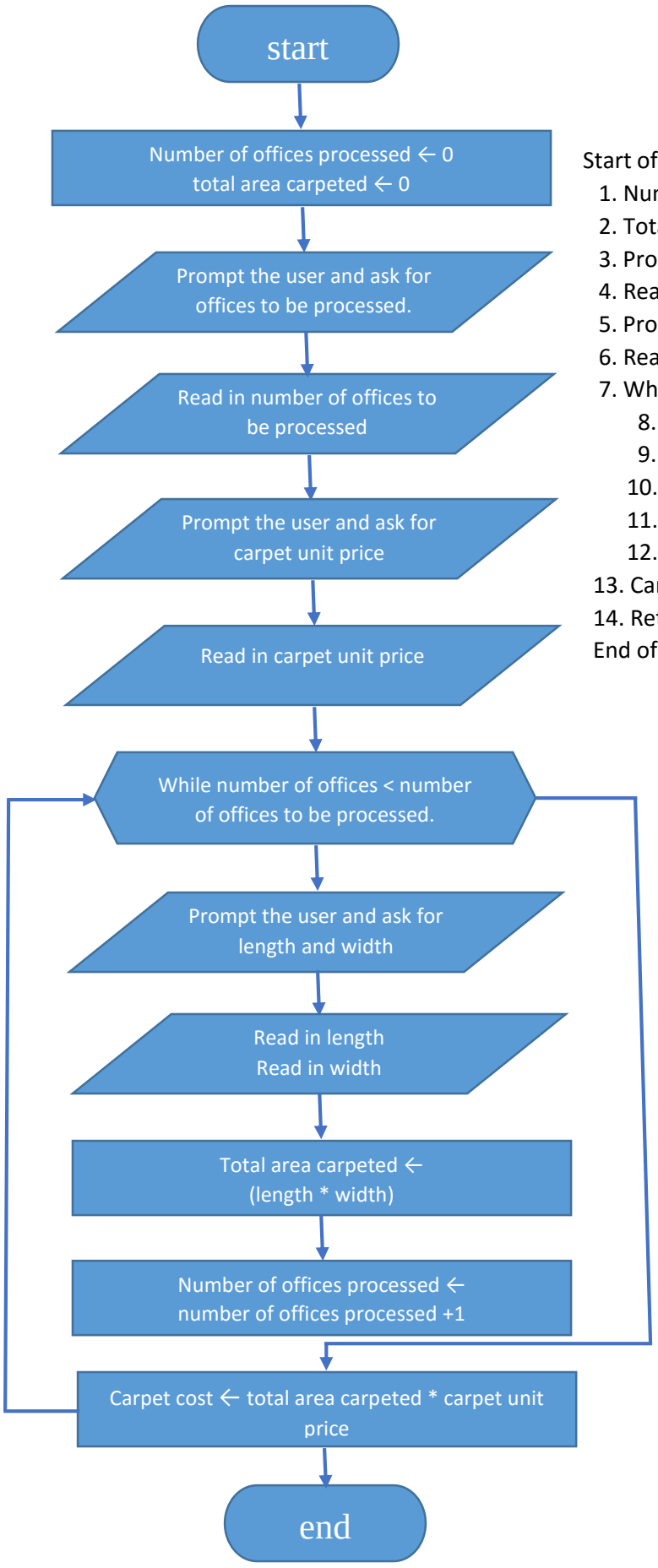
Flowchart Offices



Pseudo-code

Start of algorithm for offices

1. Number of offices processed = 0
2. Total area carpeted = 0
3. Prompt the user and ask for number of offices to be processed
4. Read in number of offices to be processed
5. Prompt the user and ask for carpet unit price
6. Read in carpet unit price
7. While number of offices < number of offices to be processed
    8. Prompt the user and ask for length and width
    9. Read in length
    10. Read in width
    11. Total area carpeted = (length * width)
    12. Number of offices processed = Number of offices processed + 1
13. Carpet cost = total area carpeted * carpet unit price
14. Return

End of algorithm for offices

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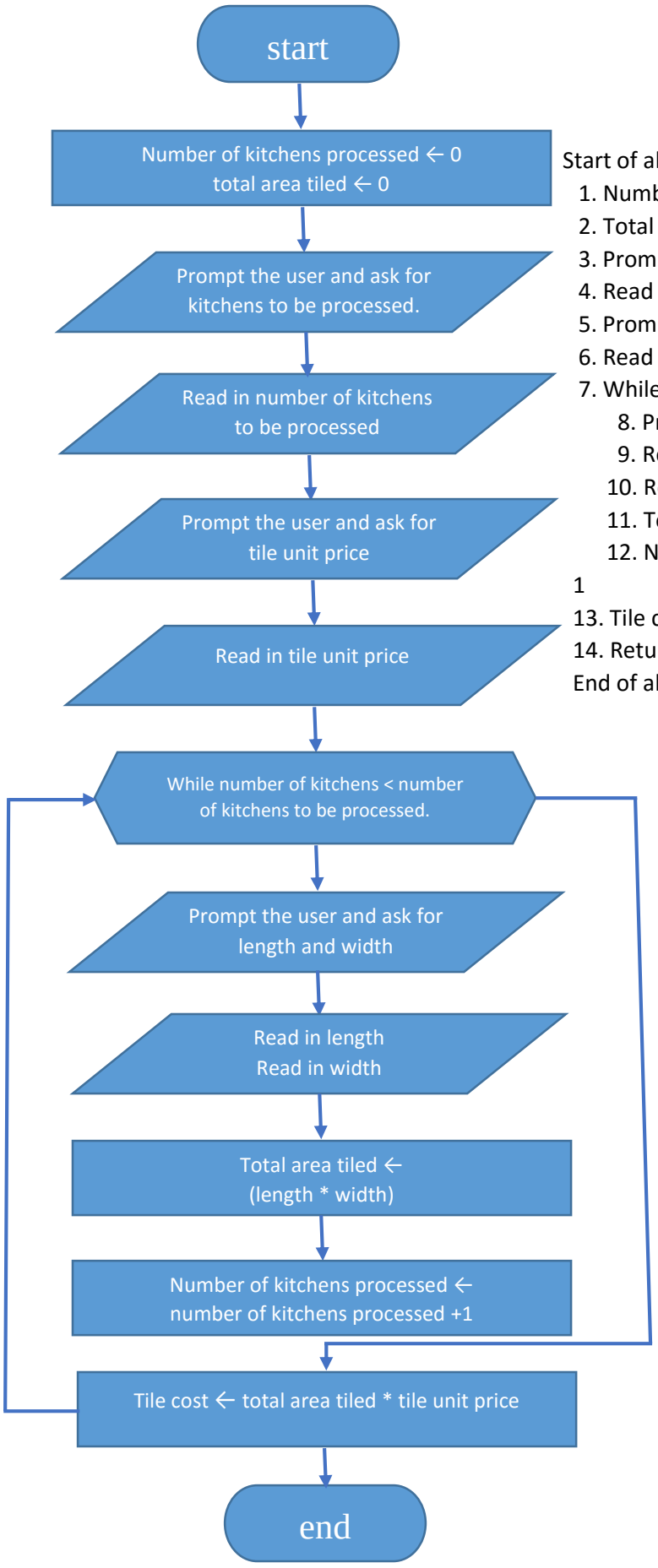
Flowchart Kitchens



Pseudo-code

Start of algorithm for kitchens

1. Number of kitchens processed = 0
2. Total area tile = 0
3. Prompt the user and ask for number of kitchens to be processed
4. Read in number of kitchens to be processed
5. Prompt the user and ask for tile unit price
6. Read in tile unit price
7. While number of kitchens < number of kitchens to be processed
    8. Prompt the user and ask for length and width
    9. Read in length
    10. Read in width
    11. Total area tiled = (length * width)
    12. Number of kitchens processed = Number of kitchens processed + 1
13. Tile cost = total area tiled * tile unit price
14. Return

End of algorithm for kitchens

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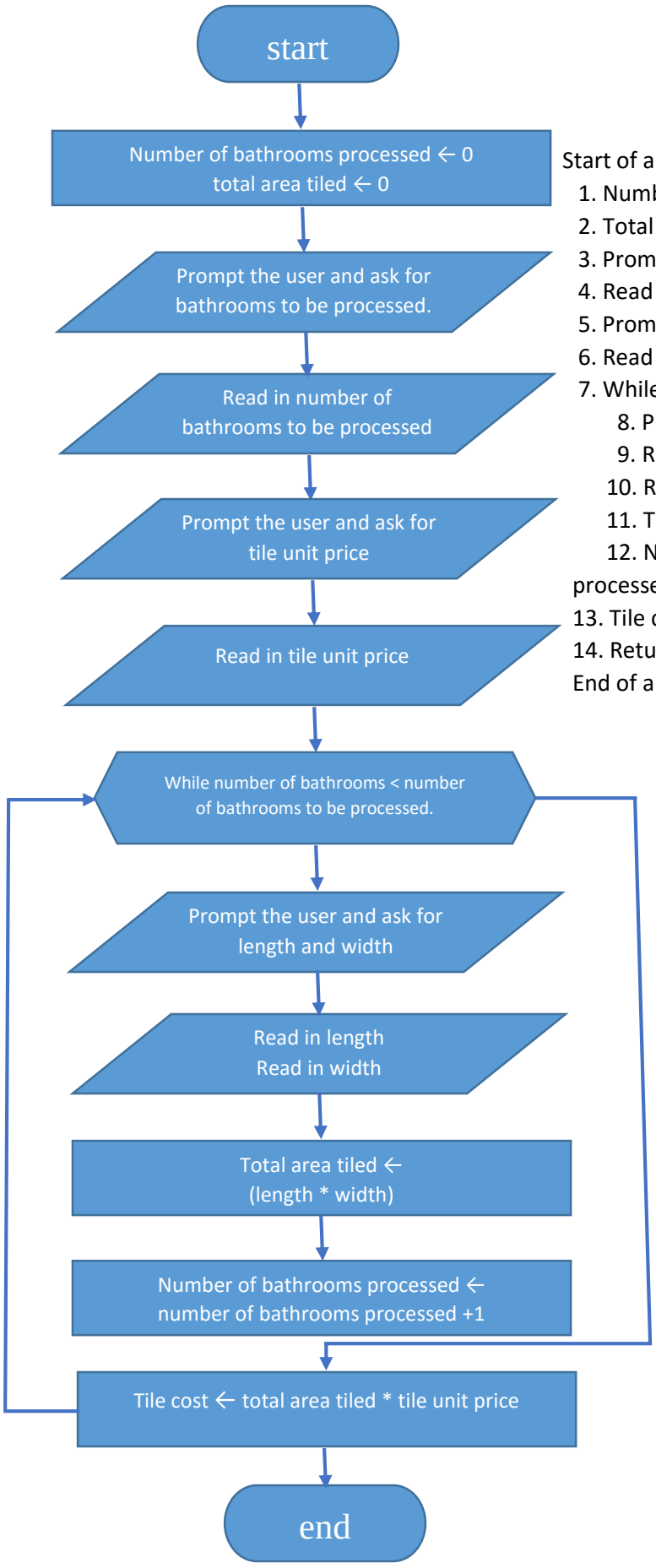
Flowchart Bathrooms



Pseudo-code

Start of algorithm for bathrooms

1. Number of bathrooms processed = 0
2. Total area tile = 0
3. Prompt the user and ask for number of bathrooms to be processed
4. Read in number of bathrooms to be processed
5. Prompt the user and ask for tile unit price
6. Read in tile unit price
7. While number of bathrooms < number of bathrooms to be processed
    8. Prompt the user and ask for length and width
    9. Read in length
    10. Read in width
    11. Total area tiled = (length * width)
    12. Number of bathrooms processed = Number of bathrooms processed + 1
13. Tile cost = total area tiled * tile unit price
14. Return

End of algorithm for bathrooms

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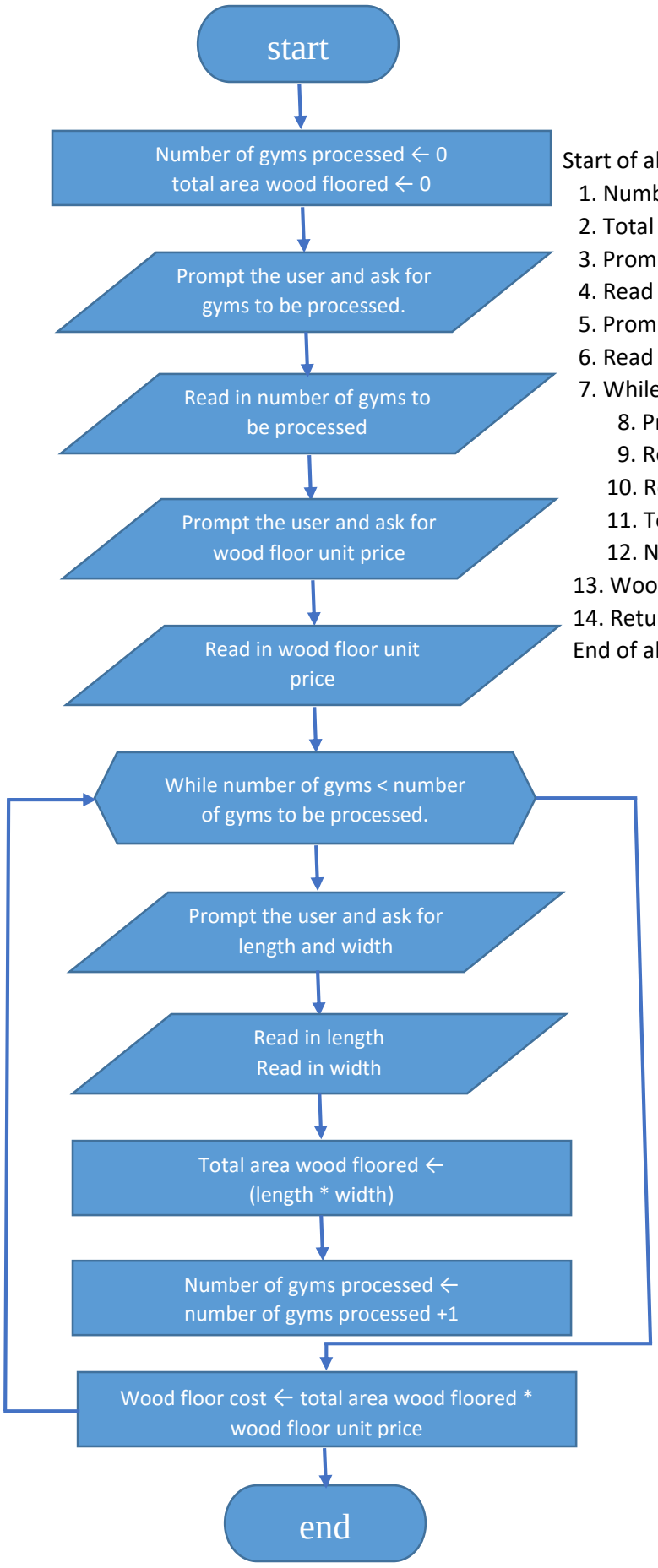
Flowchart Gyms



Pseudo-code

Start of algorithm for gyms

1. Number of gyms processed = 0
2. Total area wood floor = 0
3. Prompt the user and ask for number of gyms to be processed
4. Read in number of gyms to be processed
5. Prompt the user and ask for wood floor unit price
6. Read in wood floor unit price
7. While number of gyms < number of gyms to be processed
    8. Prompt the user and ask for length and width
    9. Read in length
    10. Read in width
    11. Total area wood floored = (length * width)
    12. Number of gyms processed = Number of gyms processed + 1
13. Wood floor cost = total area wood floored * wood floor unit price
14. Return

End of algorithm for gyms

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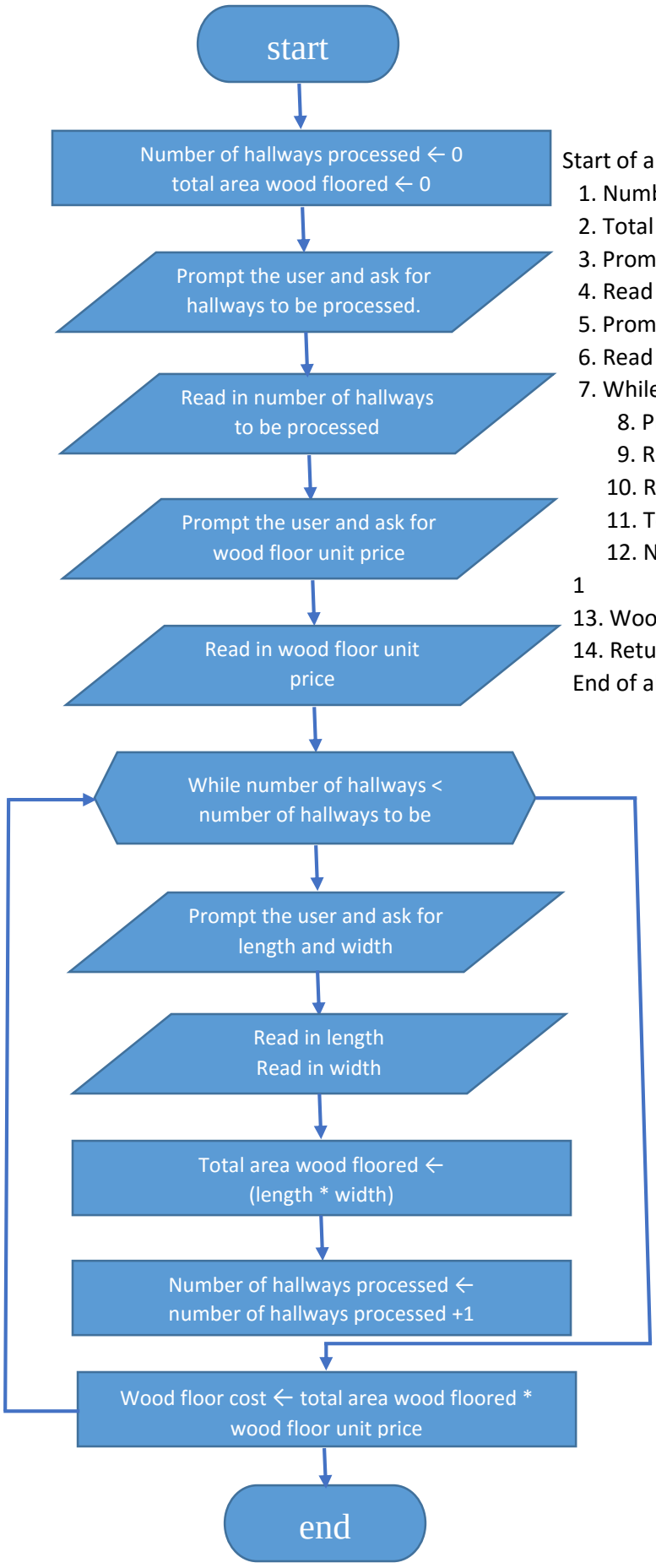
Flowchart Hallways



Pseudo-code

Start of algorithm for hallways

1. Number of hallways processed = 0
2. Total area wood floor = 0
3. Prompt the user and ask for number of hallways to be processed
4. Read in number of hallways to be processed
5. Prompt the user and ask for wood floor unit price
6. Read in wood floor unit price
7. While number of hallways < number of hallways to be processed
    8. Prompt the user and ask for length and width
    9. Read in length
    10. Read in width
    11. Total area wood floored = (length * width)
    12. Number of hallways processed = Number of hallways processed + 1
13. Wood floor cost = total area wood floored * wood floor unit price
14. Return

End of algorithm for hallways

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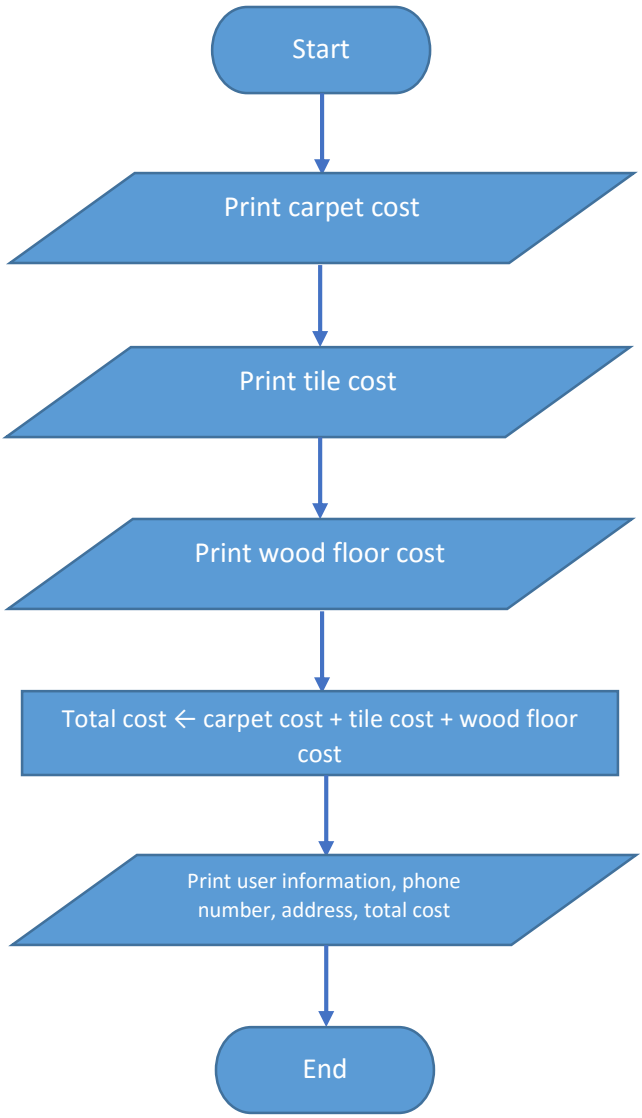
Print Report



Pseudo-code

Start of algorithm for print report
1. Print carpet cost
2. Print tile cost
3. Print wood floor cost
4. Total cost = carpet cost + tile cost + wood floor cost
5. Print user information, phone number, address, total cost
End of algorithm for print report

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User Instructions

1. Fill out the user information such as first name, last name, address, and phone number.
2. Select the type of flooring that you want done.
3. Select the type of room that is to be floored.
4. Select the pricing for the type of floor that has been selected.
5. Insert the length of the room.
6. Insert the width of the room.
7. Repeat steps 2-6 until all the rooms
8. Print out the total cost and user information

Comments

It was cool to see how programmers do their prep-work before they actually go in and code. Now that I have an idea of the preparation, I'm excited to jump in and start the introduction. I think that is when I am going to do the most learning is when I'm engaged and actively doing the things that I am trying to learn.