

Assignment report 1

When I saw the assignment, I came up with the 'for' loop to solve the problem. In order to print out the roof which is a trapezoid shape, I use the same method as the triangle practice that the teacher gave us. It's because the principle of the two problems are the same. For instance, the first line and the last line also print out only one kind of character and in the middle need to use 'for' loop to print out the character.

First of all, I use the variable 'i' to change to a new line. Then, I use 'if' conditional to decide which part of the roof I should print out, such as the roof top or the main part of the roof. In addition, inside the 'if' conditional, I put another 'for' loop to print out the horizontal part of the roof. The first 'for' loop ends. The three following 'for' loops are going to print out the bottom of the roof and the ceiling. And then there is another 'if' conditional to decide which part of the house body should print out.

The first problem I encounter is that I thought 'printchar (thickness, '@')' and 'printf(' ')' is needed in every section of the 'if' and 'else if' so I can make it at the outside of the 'if' conditional but inside the 'for' loop. However, I'm wrong. When I ran the code, it went to error. So, I make every section of the 'if' and 'else if' have the printchar (thickness, '@')' and 'printf(' ')' in order to deal with this problem.

The second problem I encounter is that I don't know how to print out the window and the door, which is a symmetry picture. I originally thought that I could use 'for' to deal with this problem, but I can't make it. Therefore, I asked my classmate how to tackle the problem. She gave me a hint of using the 'if' conditional to control when to print out the '=', '+' and '&'. And it went well. The next day, the teacher gave us another method to deal with it. The teacher used 'printchar' to print out. Moreover, I asked the assistant whether I could use the 'printchar' in my assignment. He provided another idea of using 'if' conditional, which is using the remainder equation to control when to print out the pattern. And I think this is very useful so I decided to use this method to deal with the problem.

At the end of this program, I found I didn't verify the house design at first. So, I add another 'if' conditional and the math equation at the outside of the program to verify the whole house design.