**IV. Study the code below. Is the solution correct or not? Explain your answer. It is supposed to check**

**whether an input (unsigned int) is a perfect number or not.**

Although the program or the solution is correct, since the if statement that tests "*sum == n && sum != 1*" is inside the for loop, then it would iterate the *printf()* function for as long as the condition "*cf\*cf<=n*" is satisfied. Because of that condition, even if you enter a valid perfect number, take 16 for example, it will output "16 is not a perfect number" during the first few iterations because the condition "*sum == n && sum != 1*" is still not yet met. However, in the final iteration, it will output "16 is a perfect number", which is the correct and desired output. As such, it would have been better to move the final if-else statement "*sum == n && sum != 1*" after the for loop.

Furthermore, since the if-else statement "*sum == n && sum != 1*" is written inside the for loop, it will not test the inputs less than 4. If try to input these, you will notice that the program terminates immediately without printing anything or any output. It is because the condition to "enter" or start the for loop is not met. Nonetheless, the program shows a correct solution.