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Homework 8 Write Up

For this homework I created a function that searched through all the integers between 3 and the square root of the input number n. From there my function put all the odd values in that range into an array that was half the size of the square root of n. I searched through the values starting at 3 because 1 would be the return value each time the program ran. From there my function tested each value to see if it would divide n with no remainder and if it did my function would return that value. Because I was coding in C++ I had limitations with using large integers so my function has trouble factoring very large numbers but can handle some smaller ones. When I originally used the brute force method I could find the factors of at least 20 digit integers within 30 seconds, but the brute force method is not the best way to go about this.