

CSC 230: Elementary Data Structures and Algorithms

Fall 2022

Assignment 5

- General programming guidelines:
 - Create a separate NetBeans project with the name `QuestionXX`, where `XX` is the question number.
 - Do not forget necessary javadoc comments before classes and methods.
 - You should use *single line* or *multiline* comments, **if it is required**. Do not put unnecessary comments (Do not state the obvious!!!).
 - Use meaningful identifier.
 - Don't forget to check the parameters of your methods and throw appropriate exceptions as necessary.
 - **Creating correct NetBeans projects, zipping your final assignment folder, and testing it before uploading are your responsibilities. If any of these steps fails, you will receive a grade of zero.**
- Academic integrity policy
 - You are **not** allowed to use any online resources EXCEPT Revel, class lecture notes and Java documentation.
 - All programs/ code must be your own work.
 - You should be able to clearly explain every line of your code, if instructor requests you to do so.
 - Any violation of these policies will be considered as plagiarism and dealt accordingly.

Question 1 (25 points): Write a method to determine if a given string is a palindrome. Test your method.

Question 2 (50 points): Implement the binary search algorithm. Test your method with a few searches(successful as well as failed).

Question 2 (25 points): Write a method to find the greatest common divisor of two positive numbers. Test your method.