CIS 111 Summer 2019 Project 4

Assigned date: July 22 Due Date: July 28 midnight

- 1. Take a string representing a date of birth from user, and show the date when the user will be one hundred thousand seconds of age as output [15 pts]
- 2. Take a string representing a date of birth from user, and show the day and month (with the format "mm/dd") of the user's half birthday. [15 pts]
- 3. Take a number n from user and show the Boolean value, true if the number is a palindrome, false otherwise.
 - If the input number is 1, your program should print: "1 is a palindrome? true"

 If the input number is 711, your program should print: "711 is a palindrome? false"

 If the input number is 10901, your program should print: "10901 is a palindrome? true"

 Hint: Numbers and Strings do not have a reverse method, but Arrays do. Therefore, you could use this logic to help solve this problem: convert n to a String, split it, reverse it, and join it to reverse the original number. [30pts]
- 4. Take a sentence from user and find out the word which has maximum vowel count. **Use Regular Expression**. [20pts]
- 5. Take a string from user and then show the count of characters, vowels, digits, alphabetic letters, digits, special characters (neither alphabetic nor digit) the string contains. Example:

If the input string is "2 stringifies!!", your program should print:

"The string has 15 letters, 11 alpha letters, 4 vowels, 1 digits and 3 special characters."

Use Regular Expression. [20 pts]