Assignment: Write a program that determines if an identifier is a palindrome. A palindrome is a word that is symmetrical: it can be read the same forwards and backwards. "mom" is a palindrome.

Program Files: Project **4** consists of files **p04.C**, **stack04.C**, **stack04.h**, and **p04make**. File **p04.C** contains functions that process command line arguments and determine if input identifiers are palindromes. File **stack04.C** contains the implementation of class Stack. File **stack04.h** contains the interface for class Stack. File **p04make** contains instructions for creating executable file **p04**. Instructions in file **p04make** are accepted by the UNIX utility ***make*.**

Command Line: Project **4** can be invoked with zero, one, or two program parameters. The first program parameter is the input file name. The second parameter is the output file name. Sample command lines together with corresponding actions by program **p04** are shown below. Boldfaced type indicates data entered at the keyboard by the user.

$ **p04**
Enter the input file name: **i04.dat**
Enter the output file name: **o04.dat**

$ **p04 i04.dat**
Enter the output file name: **o04.dat**

$ **p04 i04.dat o04.dat**

Input File: File **i04.dat** in the class directory **~tt/cs3103/** contains a list of representative identifiers. Refer to Figure 1. Input file format.

Output File: Program **p04** produces file **o04.dat.** File **o04.dat** shown in Figure 2 is the output produced by program **p04** given the input file shown in Figure 1.

Figure 1.
Input file format

mom dad priscilla kathy tom tot ted totot

Figure 2.
Output file format

mom is a palindrome.
dad is a palindrome.
priscilla is not a palindrome.
kathy is not a palindrome.
tom is not a palindrome.
tot is a palindrome.
ted is not a palindrome.
totot is a palindrome.