

## Lab 12 Tasks

**Q1.** Take a string as input from the user. Create a file called “*file1.txt*”. Print the string in the file. Add necessary error- checking in your code.

**Q2.** Copy the file named “*Q2.txt*” from the FTP to your PC. Now print the content of that file in the console. Add necessary error- checking in your code.

**Q3.** Copy the file named “*Q3.txt*” from the FTP to your PC. Now print the content of that file in another file called “*file2.txt*”. The new file should ignore all the newline characters found in the first file and replace them with space. Add necessary error-checking in your code.

**Q4.** A palindrome is a sequence of one or more characters that reads the same from the left as it does from the right. For example, Z, TOT and MADAM are palindromes, but ADAM is not.

Your job, should you choose to accept it, is to write a program that reads a sequence of strings and for each string determines the number of UNIQUE palindromes that are substrings.

### Input

The first line will specify the total number of inputs. The subsequent lines will contain from 1 to 80 characters.

### Output

The output consists of one line containing the message: The string '*input string*' contains *nnnn* palindromes. where *input string* is replaced by the actual input string and *nnnn* is replaced by the number of UNIQUE palindromes that are substrings.

### Not

See below the explanation of the sample below

- The 3 unique palindromes in ‘boy’ are ‘b’, ‘o’ and ‘y’.
- The 4 unique palindromes in ‘adam’ are ‘a’, ‘d’, ‘m’, and ‘ada’.
- The 5 unique palindromes in ‘madam’ are ‘m’, ‘a’, ‘d’, ‘ada’, and ‘madam’.
- The 3 unique palindromes in ‘tot’ are ‘t’, ‘o’ and ‘tot’

Sample Input	Sample Output
boy adam madam tot	The string 'boy' contains 3 palindromes. The string 'adam' contains 4 palindromes. The string 'madam' contains 5 palindromes. The string 'tot' contains 3 palindromes.

**Q5.** An anagram is a word, phrase or name formed by rearranging the letters of another. For example “iceman” and “cinema” anagram to each other. Write a program in C that reads two strings and checks whether they are anagram or not.

Sample Input	Sample Output
Iceman      Cinema Computer    Monitor Abcdef     Deabcf	Anagram Not Anagram Anagram