Birla Institute of Technology & Science, Pilani, K. K. BIRLA Goa Campus Computer Programming (CS F111) Second Semester 2017-2018 Lab-8 (Strings)

PreLab Exercise (Evaluative)

Question #1: Monday and Tuesday Batch (Lab Sections 1 to 6)

Given a String Str, display all palindromes and find the number of special palindrome substrings of size greater than 1.

Definitions: A Palindrome is a string that reads the same backwards as forward, e.g. madam A Substring is called special palindrome substring if all the characters in the substring are same or only the middle character is different for odd length.

Example: "aabaa" and "aaa" are special palindromic substrings and "abcba" is not a special palindromic substring.

1. Sample INPUT and Output:

Enter a string abab
The palindromes in the string are aba, bab
The special palindromic substrings are aba, bab

2. Sample INPUT and Output:

Enter a string ababa
The palindromes in the string are aba, bab, aba, ababa
The special palindromic substrings are aba, bab, aba

3. Sample INPUT and Output:

Enter a string abcba The palindromes in the string are bcb, abcba The special palindromic substrings are bcb