CS23304 –Java Programming Laboratory – N batch

Class and class String

Exercise-III

Date: 30.7.25 marks: 15 marks

1. The double helix of DNA is composed of two complementary strands. Because the base pairs are formed by pairing A with T and G with C, we can easily find the complement of a given DNA strand by simple substitutions. For example, the complement of GATTCGATC is CTAAGCTAG. Write a program that outputs the complement of a given DNA strand. Repeat the operation until an empty string is entered.
2. Make the following modifications to class Book:
    a. Include a data member number of copies (int)
    b. Include bool issue(String) - which searches for the given title of the Book in the arraylist of books and if found, decrements the number of copies. Successful issue function returns True otherwise False
    c. Include bool return(String) - which searches for the given title of the Book in the arraylist of books and if found, increments the number of copies. Successful return function returns True otherwise False
3. Define class called Employee with data members: name(String), empId(int), salary(double) and designation(String). The member functions are constructor with four arguments, void display(). Create a Test class to create an arraylist of Employee and test the functions