**DEPARTMENT OF INFORMATION TECHNOLOGY, JNTUHUCESTH**

**MCA-II Sem.(2022-24 Batch)**

**JAVA PROGRAMMING LAB.**

**ASSIGNMENT-3**

**1.Write a Java program to perform the following:**

**i)Create a LinkedList collection containing the following string objects(colors):**

**red , blue, green, yellow, black.**

**ii)Using an iterator, scan the above list and remove all elements(colors) that have**

**a string length of less than 5.**

**2.Write a Java program to perform the following:**

**i)Create an ArrayList collection containing the following string objects(colors):**

**red , blue, green, yellow, black.**

**ii)Use foreach statement that scans the above list and outputs the**

**elements(colors).**

**iii)Using an appropriate iterator, replace the string, “yellow” with string “purple”**

**in the above list.**

**3. Write a Java program to perform the following:**

**i)Create a LinkedList collection containing the following string objects(colors):**

**red , blue, green, yellow, black.**

**ii)Using a ListIterator, scan the above list in the reverse order(ie. from last to**

**first) and remove all elements(colors) that have a string length of less than 5.**

**4. Write a Java program to perform the following:**

**i)Create a HashMap that contains 4 mappings of student names and their end**

**marks in a subject.**

**ii)Obtain a set view of the mappings. Then traverse the set using an iterator and**

**display the contents of the map.**

**5. Write a Java program to perform the following:**

**i)Create a LinkedList collection containing the following string objects(colors):**

**red , blue, green, yellow, black.**

**ii)Sort the colors in ascending order and then search for a color(key) in the**

**sorted list of colors using binary search. Display appropriate message.**

**6. Write a Java program that counts the occurrences of words in a text and**

**displays the words and their occurrences in alphabetical order of words.**

**Hint:Use a TreeMap to store an entry consisting of a word and its count.**

**7. Write a Java program to perform the following:**

**i)Create a TreeSet collection containing the following string objects(colors):**

**red , blue, green, yellow, black.**

**ii)Use an appropriate iterator, traverse the above TreeSet and display the**

**contents.**

**8. Write a Java program to perform the following:**

**i)Create a PriorityQueue collection and add the following string**

**objects(colors) in the order given:**

**red , blue, green, yellow, black.**

**ii)Use an appropriate iterator, traverse the above PriorityQueue and display**

**the contents.**

**iii)Remove the elements(string objects(colors)) from the above PriorityQueue**

**and display them.**