|  |  |  |  |
| --- | --- | --- | --- |
| **Experiment Name:** | Quick sort | | |
| **Experiment No. :** | 26 | **Date :** | 07.10.24 |
| **Compiler :** | javac | **Filename :** | QuickSort.java |
| **Aim :** | Write a java program to implement quick sort for strings | | |
| **PROGRAM:**  import java.util.\*;  class QuickSort{  ArrayList<String> names;  QuickSort(){  names = new ArrayList<String>();  }  void insertElements(){  char ch = 'y';  Scanner sc = new Scanner(System.in);  System.out.println("Insert elements into array list ..");  do{  System.out.println("Enter the element : ");  names.add(sc.nextLine());  System.out.println("Continoue entry ? (y/n) ");  }while(sc.nextLine().charAt(0) == 'y');  }  void printList(){  System.out.println("Printing the array list ..\n ");  for (String el: names) {  System.out.print(el + " ");  }  }  void sort(int left,int right){  String pivot = names.get(left);  int i = left;  int j = right;  if(left >= right){  return;  }  while(i < j){  while(names.get(i).compareTo(pivot) < 0){  i ++;  }  while(names.get(j).compareTo(pivot) > 0 ){  j--;  }  if(i < j){  Collections.swap(names, i, j);  }  }  sort(left,j-1);  sort(j+1,right);  }  void startSort(){  sort(0,(names.size()-1));  System.out.println(" Sorting the list");  }  public static void main(String[] args){  QuickSort qs = new QuickSort();  qs.insertElements();  qs.printList();  qs.startSort();  System.out.println(" After sort");  qs.printList();  }  }  **OUTPUT:** | | | |