CHRISTIAN NII COMMEY SOLOMON - 040918451

1. Write a Java program that will prompt a terminal operator for three characters, accept those characters as input, sort them into ascending sequence, and output them to the screen. Do not use a Java sort function for this exercise

**Solution**

package com.lectureTwo.gctu;

import java.util.Scanner;

public class Main {

public static char[] arr = new char[3];

public static void main(String[] args) {

//Declare variables

Scanner sc = new Scanner(System.in);

char a, b, c;

//Prompt user for inputs

System.out.println("Enter the first character");

a = sc.next().charAt(0);

System.out.println("Enter the second character");

b = sc.next().charAt(0);

System.out.println("Enter the third character");

c = sc.next().charAt(0);

SortCharactersInDescendingOrder(a, b, c);

System.out.println(arr);

}

public static char GreatestOfTwoCharacters(char m, char n) {

if (m == n) return m;

return m > n ? m : n;

}

public static char LeastOfTwoCharacters(char m, char n) {

if (m == n) return m;

return m < n ? m : n;

}

public static void SortCharactersInDescendingOrder(char x, char y, char z) {

if ((x > y) && (x > z)) {

PopulateArray(x, GreatestOfTwoCharacters(y, z), LeastOfTwoCharacters(y, z));

}

else if ((x > y) && (x < z)) {

PopulateArray(z, x, y);

}

else if ((x < y) && (x > z)) {

PopulateArray(y, x, z);

}

else {

PopulateArray(GreatestOfTwoCharacters(y, z), LeastOfTwoCharacters(y, z), x);

}

}

public static void PopulateArray(char m, char n, char o) {

arr[0] = o;

arr[1] = n;

arr[2] = m;

}

}