Java Programming [CSE201] Enrolment No.:23DCS002

CHAROTAR UNIVERSITY OF SCIENCE & TECHNOLOGY

**DEVANG PATEL INSTITUTE OF ADVANCE TECHNOLOGY & RESEARCH**

Department of Computer Science & Engineering

Subject Name: Java Programming

Semester: 3rd

Subject Code: CSE201

Academic year: 2024-25

Part - 2

|  |  |
| --- | --- |
| **No.** | **Strings** |
| 7 | Given a string and a non-negative int n, we'll say that the front of the string is the first 3 chars, or whatever is there if the string is less than length 3. Return n copies of the front; front\_times('Chocolate', 2) → 'ChoCho' front\_times('Chocolate', 3) → 'ChoChoCho' front\_times('Abc', 3) → 'AbcAbcAbc'  **PROGRAM CODE:**  import java.util.Scanner;  public class prec7 {      public static void main(String[] args) {          String n;          Scanner s = new Scanner(System.in);          System.out.println("Enter String = ");          n = s.nextLine();          String n1 = n.substring(0, 3);          front\_times(n1, 2);      }      static void front\_times(String n, int a) {          int i;          for (i = 0; i < a; i++) {              System.out.print(n);          }      }  }  **OUTPUT:**    **CONCLUSION:** Learnt about strings and their functions. |

|  |  |
| --- | --- |
| 8 | Given an array of integers, return the number of 9's in the array. array\_count9([1, 2, 9]) → 1 array\_count9([1, 9, 9]) → 2 array\_count9([1, 9, 9, 3, 9]) → 3  **PROGRAM CODE:**  public class prec8 {      public static void main(String[] args) {          int[] arr={1,2,4,7,8,9,9,9};          count9(arr);      }      static void count9(int[]arr)      {          int count=0;          for(int i=0;i<arr.length;i++)          {              if(arr[i]==9)              {                  count++;              }          }          System.out.println("Total Count = "+ count );      }  }  **OUTPUT:**    **CONCLUSION:** In this practical we created function which it counts total numbers of 9 in the given array. |
| 9 | Given a string, return a string where for every char in the original, there are two chars. double\_char('The') → 'TThh ee' double\_char('AAbb') → 'AAAAbbbb' double\_char('Hi-There') → 'HHii--TThheerree'  **PROGRAM** **CODE**:  import java.util.Scanner;  public class prec9 {      public static void main(String[] args) {          Scanner s1 = new Scanner(System.in);          System.out.print("Enter your string: ");          String str = s1.nextLine();          for (int i = 0; i < str.length(); i++) {              char c = str.charAt(i);              System.out.print(c + "" + c);          }      }  }  **OUTPUT**:    **CONCLUSION**: In this practical we used charAt function to access each character of string and double them. |
| 10 | Perform following functionalities of the string:  ● Find Length of the String  ● Lowercase of the String  ● Uppercase of the String  ● Reverse String  ● Sort The String  **PROGRAM CODE:**  import java.util.Scanner;  class prec10 {      public static void main(String[] args) {          String a;          int i, j;          char ch1;          Scanner s = new Scanner(System.in);          System.out.println("Enter String : ");          a = s.nextLine();          char[] c = a.toCharArray();          System.out.println("String Length = " + a.length());          System.out.println("Lower String = " + a.toLowerCase());          System.out.println("Upper String = " + a.toUpperCase());          System.out.println("Reversed String = ");          for (i = a.length() - 1; i >= 0; i--) {              System.out.print(a.charAt(i));          }          System.out.println("\nSorted String = ");          for (i = 0; i < a.length()-1; i++) {              for (j = 0; j < a.length() - i-1; j++) {                  if (c[j] > c[j + 1]) {                      ch1 = c[j];                      c[j] = c[j + 1];                      c[j + 1] = ch1;                  }              }          }          for(i=0;i<a.length();i++)          {              System.out.print(c[i]);          }      }  }  **OUTPUT**:    **CONCLUSION:** In this practical we used multiple string manipulation funtions. |
| 11 | Perform following Functionalities of the string: “CHARUSAT UNIVERSITY”  ● Find length  ● Replace ‘H’ by ‘FIRST LATTER OF YOUR NAME’  ● Convert all character in lowercase  **PROGRAM CODE:**  public class prec11 {      public static void main(String[] args) {          String a = "CHARUSAT UNIVERSITY";          System.out.println("Length Of String = " + a.length());          char [] c = a.toCharArray();          for(int i=0;i<a.length();i++)          {              if(c[i]=='H')              {                  c[i]='R';              }          }            for(int i=0;i<a.length();i++)          {              System.out.print(c[i]);          }          System.out.println("\nLowered String = ");          for (int i = 0; i < a.length(); i++) {              if(c[i]>='A' && c[i]<'Z')              {                  c[i]+=32;              }              System.out.print(c[i]);      }  }}  **OUTPUT:**    **CONCLUSION:** In this practical we learnt charArray function. |