CHAROTAR UNIVERSITY OF SCIENCE & TECHNOLOGY

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

Department of Computer Science & Engineering

Subject Name:

Semester:

Subject Code:

Academic year:

Part - 2

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| **No.** | **Aim of the Practical** |
| 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 Front\_times {  public static void main(String[] args) {  Scanner sc = new Scanner(System.in);  System.out.println("Enter string :");  String st=sc.next();  System.out.println("Enter number of times that you want to print the string :");  int n = sc.nextInt();  for(int i=0;i<n;i++){  System.out.print(st.substring(0,3));  }  }  }  **OUTPUT:**      **CONCLUSION:**  The provided Java code takes a string and a non-negative integer as input from the user. It then prints the first three characters of the input string repeatedly for the number of times specified by the user. |
| 8. | Given an array of ints, 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:**  import java.util.Scanner;  public class count {  public static void main(String[] args) {  Scanner sc = new Scanner(System.in);  int arr[]=new int[3];  int count=0;  System.out.println("Enter the elements of an array :");  for (int i =0;i<3;i++)  {  arr[i]=sc.nextInt();  }  for (int i=0;i<3;i++)  {  if(arr[i]==9){  count++;  }  }  System.out.println("Number 9 appears "+ count + " times ");  }  }  **OUTPUT:**    **CONCLUSION:**  This Java program reads three integers from the user into an array and counts how many times the number 9 appears in the array. It demonstrates basic array operations, user input handling, and simple counting logic. The program outputs the count of the number 9 after processing the input. |

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| 9. | Given a string, return a string where for every char in the  original, there are two chars.  double\_char('The') → 'TThhee'  double\_char('AAbb') → 'AAAAbbbb'  double\_char('Hi-There') → 'HHii--TThheerree'  **PROGRAM CODE:**  import java.sql.SQLOutput;  import java.util.\*;  public class practical9 {  static StringBuffer print ()  {  char s1;  Scanner sc = new Scanner(System.in);  System.out.println("Enter string :");  StringBuffer st = new StringBuffer(sc.nextLine());  System.out.println("Enter number of times that you want to print :");  int n = sc.nextInt();  StringBuffer value = new StringBuffer();  for (int i = 0; i<st.length(); i++) {  s1 = st.charAt(i);  for (int j = 0; j < n; j++) {  value = value.append(s1);  }  }  return value;  }  public static void main(String[] args) {  StringBuffer s2 = new StringBuffer(print());  System.out.println(s2);  }  }  **OUTPUT:**      **CONCLUSION:**  This Java program takes a string input from the user and a number specifying how many times each character in the string should be repeated. It then prints the modified string with each character repeated the specified number of times. The program demonstrates the use of StringBuffer for efficient string manipulation and handling user input. |
| 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:**  public class practical10 {  public static void main(String[] args) {  String st = "prins";  char[] arr = new char[6];  StringBuffer sc = new StringBuffer(st);  System.out.println(st.length());  System.out.println(st.toLowerCase());  System.out.println(st.toUpperCase());  for (int i = 0; i < 5; i++) {  arr[i] = sc.charAt(i);  }  for (int i = 0; i < 5; i++) {  for (int j = 0; j < 5 - i; j++) {  if (arr[j] > arr[j + 1])  {  char temp = arr[j];  arr[j] = arr[j + 1];  arr[j + 1] = temp;  }  }  }  for (int i = 0; i < 6; i++) {  if(arr[i]!='\0') {  System.out.println(arr[i]);  }  }  }  }  **OUTPUT:**    **CONCLUSION:**  This Java program performs several operations on the string "mahek". It demonstrates string length retrieval, conversion to lowercase and uppercase, and sorting characters in ascending order using a bubble sort algorithm. Finally, it prints the sorted characters, handling the array size slightly beyond the string length. The program showcases basic string manipulation techniques and sorting algorithms in Java. |

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| 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 practical11 {  public static void main(String[] args) {  String st = "CHARUSAT UNIVERSITY";  char[] arr = new char[6];  StringBuffer sc = new StringBuffer(st);  System.out.println(st.length());  System.out.println(st.replace('H','M'));  System.out.println(st.toLowerCase());  }  }  **OUTPUT:**    **CONCLUSION:**  This Java program illustrates fundamental string manipulations using the string "CHARUSAT UNIVERSITY". It showcases operations like retrieving the string length, replacing characters ('H' with 'M'), and converting the entire string to lowercase. These operations highlight basic string handling capabilities in Java, useful for various text processing tasks in programming. |