

INDEX

| No. | Date | Practical Name | Page | Grade | Signature |
|-----|------|---|------|-------|-----------|
| | | List of Experiments: | | | |
| 1 | 23-6 | Write a program to convert rupees to dollar. 60 rupees=1 dollar. | | | |
| | 23-6 | Write a program that calculates percentage marks of the student if marks of 6 subjects are given. | | | |
| 2 | 23-6 | Write a program to enter two numbers and perform mathematical operations on them. | | | |
| | 23-6 | Write a program to find length of string and print second half of the string. | | | |
| 3 | 30-6 | Write a program to accept a line and check how many consonants and vowels are there in line. | | | |
| | 30-6 | Write a program to count the number of words that start with capital letters. | | | |
| 4 | 7-7 | Write a program to find that given number or string is palindrome or not. | | | |
| | 7-7 | Create a class which asks the user to enter a sentence, and it should display count of each vowel type in the sentence. The program should continue till user enters a word "quit". Display the total count of each vowel for all sentences. | | | |
| 5 | 7-7 | Write an interactive program to print a string entered in a pyramid form. For instance, the string "stream" has to be displayed as follows: <div style="text-align: center;"> S S t S t r S t r e S t r e a S t r e a m </div> | | | |
| | 7-7 | Write an interactive program to print a diamond shape. For example, if user enters the number 3, the diamond will be as follows: <div style="text-align: center;"> * * * * * * * * * </div> | | | |
| 6 | 14-7 | Create one Abstract Class Shape that has two variables for dimensions and one Abstract method called area(). Create two subclass Rectangle and Triangle of Shape class and find the area of Rectangle and Triangle. Create appropriate Constructors for data. | | | |
| 7 | 21-7 | WAP to demonstrate concept of different type of access modifiers using Package. | | | |
| 8 | 28-7 | The transport interface declares a deliver() method. The abstract class Animal is the super class of the Tiger, Camel, Deer and Donkey classes. The Transport interface is implemented by the | | | |

| | | | | | |
|----|------|--|--|--|--|
| | | Camel and Donkey classes. Write a test program that initialize an array of four Animal objects. If the object implements the Transport interface, the deliver() method is invoked. | | | |
| 9 | 4-8 | Write a program that generates custom exception if any integer value given from its command line arguments is negative. | | | |
| 10 | 11-8 | Write a program to create two threads, one thread will print odd numbers and second thread will print even numbers between 1 to 20 numbers | | | |
| 11 | 18-8 | Create a class called Student. Write a student manager program to manipulate the student information from files by using FileInputStream and FileOutputStream | | | |
| | 18-8 | Refine the student manager program to manipulate the student information from files by using the BufferedReader and BufferedWriter. | | | |
| 12 | 25-8 | Refine the student manager program to manipulate the student information from files by using the DataInputStream and DataOutputStream. Assume suitable data. | | | |
| 13 | 1-9 | Categorize the following relationships into generalization, aggregation or association. [A] A country has a capital city. [B] A dining philosopher uses a fork. [C] A file is an ordinary file or a directory file. [D] Files contains records. [E] A polygon is composed of an ordered set of points. [F] A drawing object is text, a geometrical object, or a group. [G] A person uses a computer language on a object. [H] Modems and keyboards are input/output devices. [I] Classes may have several attributes. [J] A person plays for a team in a certain year. [K] A route connects two cities. [L] A student takes a course from a professor. | | | |
| 14 | 1-9 | Prepare a state diagram for an interactive diagram editor for selecting and dragging objects. | | | |
| | 1-9 | Prepare a use case diagram and sequence diagram for a computer email system. | | | |
| 15 | 8-9 | Prepare an activity diagram for computing a restaurant bill, there should be charge for each delivered item. The total amount should be subject to tax and service charge of 18% for group of 6 and more. For smaller groups there should be a blank entry. Any coupons or gift certificates submitted by the customer should be subtracted. | | | |
| 16 | 8-9 | Prepare a sequence diagram for issuing a book in the library management system. | | | |
| | | Design based Problems (DP)/Open Ended Problem : | | | |
| 1 | | Remove duplicate lines from a large text or given document. | | | |