

Lab:

Date of the Session: \_\_\_\_/\_\_\_\_/\_\_\_\_ Time of the Session: \_\_\_\_\_ to \_\_\_\_\_

Prerequisite: Exception Handling

Pre-Lab Task:

1. An old man wants to distribute sweets to children near his home. He was confused of how many sweets he must give to each child. Help the old man by writing a program where the number of sweets and number of children are initialized using parameterized constructor. Observe what happens when there are zero number of children and handle the exception if any.
2. Write java program to read 10 values into an array and prints the value in 11th index

In-Lab Task:

1. Election committee wants to check whether the voter is eligible to vote or not. The person can vote if his age is greater than 18. Help the Election committee by developing a code which arises exception if the voter age is less than 18 then print the exception and "VOTER IS NOT ELIGIBLE TO VOTE", otherwise print "VOTER IS ELIGIBLE TO VOTE". (Hint: Develop user-defined Exception)
2. Enhance the Lab-5 In-Lab Task Q2, such that when Invalid ID (-ve number) is given it must throw InvalidIDException, and InvalidNameException when name has special characters or digits.

Post-Lab Task:

1. Enhance Q2, to read data from file. The program must close the file even when an exception arises or not. (Hint: Use finally block)

Lab:

Date of the Session: \_\_\_\_/\_\_\_\_/\_\_\_\_ Time of the Session: \_\_\_\_ to \_\_\_\_

Prerequisite: Multithreading

Pre-Lab Task:

1. You are given a task of printing the first five natural numbers assigned to all three different threads which should be created by implementing runnable interface. Run this program for three times and check the printing style each time.

2. Perform the Pre-Lab Q1 task by extending the Thread class.

In-Lab Task:

1. Rohan was asked by his teacher to develop a program which takes in a dynamic user input and prints all the prime numbers till that number and then prints all the composite numbers till that number. Help him out by developing the program to do so. Use one thread each for both prime and composite numbers

2. Tony was asked to develop a program which takes in five alphabets as dynamic user input and stores them in an array. He passes the array to two threads. First one should traverse the array, and the vowels present in it should be printed and the second thread should print the consonants present in the array. Help him out by writing the program.

Post-Lab Task:

1. You are asked to take two integer values as dynamic user inputs. The values are then passed to two threads where their respective multiplication table's logic (up to 10) should be written in a synchronized block and print them.