17CS21P1- JAVA PROGRAMMING LABORATORY

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| **Course Category:** | Core | **Credits:** | 2 |
| **Course Type:** | Practical | **Lecture – Tutorial – Practical:** | 0-0-3 |
| **Prerequisite:** | Basic knowledge of programming fundamentals. | **Sessional Evaluation:**  **Univ.Exam Evaluation:**  **Total Marks:** | 40  60  100 |
| **Objectives** | * To strengthen the ability to identify and apply the suitable object oriented concept for the given real world problems. * To develop skills to design the applications in java. | | |

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| **Course Outcomes** | At the end of this lab session, the students will be able to learn to develop various applications using core concepts of Java. |
| **Course Content** | 1. a)Write a Java program to display the default value of all primitive data types in Java.   b) Write a Java program to sort given list of numbers.   1. Write a java program to implement two dimensional arrays. 2. a)Write a java program to sort a given list of names.   b) Write a java program that checks whether a given string is a palindrome or not   1. a) Write a java program that gives an example for **this operator**.   b) Write a java program that gives an example for **super keyword.**   1. Write a java program that gives demonstration of static variables and methods. 2. Write a java program that implements different types of inheritance. 3. Write a java program that demonstrates the difference between method overloading and method overriding. 4. Write a java program that describes the exception handling mechanism. 5. Write a java program that illustrates the creation of threads by extending Thread class, a constructor that calls the base class constructor, using super and starts the thread. Run method of the class starts after this. It can be observed by both main thread and created child thread is executed concurrently. 6. Write a java program to create a package named mypack and import it in circle class. 7. Write a java program that implements mouse handling events. 8. Write a java program that establishes JDBC Connection with any database to retrieve the data. |
| **Text Books and References:** | **Reference Books:**   1. An introduction to java programming and object oriented application development, R A Johson-Thomson. 2. Java: The Complete Reference, 7th Edition, Herbert Schildt TMH. |
| **E-Resources** | 1. [**https://nptel.ac.in/courses**](https://nptel.ac.in/courses) 2. [**https://freevideolectures.com/university/iitm**](https://freevideolectures.com/university/iitm) 3. [**www.javatpoint.com**](http://www.javatpoint.com) |