



**JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY KAKINADA**  
**KAKINADA – 533 003, Andhra Pradesh, India**  
**DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING**

<b>II Year - I Semester</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
	<b>0</b>	<b>0</b>	<b>3</b>	<b>1.5</b>
<b>OOPS THROUGH JAVA LAB</b>				

**Course Outcomes:** At the end of the course, students will be able to

		Knowledge Level (K)#
<b>CO1</b>	Identify classes, objects, members of a class and the relationship among them needed for a specific problem	K3
<b>CO2</b>	Implement programs to distinguish different forms of inheritance	K4
<b>CO3</b>	Create packages and to reuse them	K3
<b>CO4</b>	Develop programs using Exception Handling mechanism	K3
<b>CO5</b>	Develop multithreaded application using synchronization concept.	K6
<b>CO6</b>	Design GUI based applications using Swings and AWT.	K6

**List of programs to be executed:**

1. The Fibonacci sequence is defined by the following rule. The first 2 values in the sequence are 1, 1. Every subsequent value is the sum of the 2 values preceding it. Write a Java Program that uses both recursive and non-recursive functions to print the nth value of the Fibonacci sequence.
2. Write a Java Program that prompts the user for an integer and then prints out all the prime numbers up to that integer.
3. Write a Java program to implement call by value and call by reference mechanisms.
4. Write a Java Program that checks whether a given string is a palindrome or not.
5. Write a Java Program to check the compatibility for multiplication, if compatible multiply two matrices and find its transpose.
6. Write a Java program to implement constructor overloading and method overloading.
7. Write a Java Program that illustrates how runtime polymorphism is achieved.
8. Write a Java Program that illustrates the use of super keyword.
9. Write a Java Program to create and demonstrate packages.
10. Write a Java Program, using String Tokenizer class, which reads a line of integers and then displays each integer and the sum of all integers.
11. Write a Java Program that reads a file name from the user then displays information about whether the file exists, whether the file is readable/ writable, the type of file and the length of the file in bytes and display the content of the file using FileInputStream class.
12. Write a Java Program that displays the number of characters, lines and words in a text/textfile.
13. Write a Java Program to implement a Queue, using user defined Exception Handling (also make use of throw, throws).



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14. Write a Java Program that creates 3 threads by extending Thread class. First thread displays “Good Morning” every 1 sec, the second thread displays “Hello” every 2 seconds and the third displays “Welcome” every 3 seconds. (Repeat the same by implementing Runnable).
15. Write a Java Program demonstrating the lifecycle of a thread.
16. Write an Applet that displays the content of a file.
17. Write a Java Program that works as a simple calculator. Use a grid layout to arrange buttons for the digits and for the +, -, \*, %, / operations. Add a text field to display the result.
18. Write a Java Program for handling mouse events, keyboard events.
19. Write a Java Program that allows user to draw lines, rectangles and ovals.
20. Write a Java Program that lets users create Pie charts. Design your own user interface (with Swings & AWT).