21GENP2	PROGRAMMING FOR PROBLEM SOLVING LABORATORY	L	T	P	C
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Course Objectives:

- To understand the problem solving approaches.
- To learn the basic programming constructs in Python.
- To practice various computing strategies for Python-based solutions to real world problems.
- To use Python data structures – lists, tuples, dictionaries.
- To do input/output with files in Python.

Lab Practice	15 Hours

1. Demonstrate to numeric value.
2. Find the number is even or odd using a for loop.
3. Exponentiation (power of a number)
4. Find the maximum of a list of numbers
5. Linear search and Binary search
6. Implement Merge Sort, Selection sort & Insertion sort
7. First n prime numbers
8. Multiply matrices
9. Demonstrate list and tuples in python.
10. Programs that take 2 numbers as command line arguments and print its sum.
11. Find the most frequent words in a text read from a file

Course Outcomes:

On completion of the course, students will be able to:
- Develop algorithmic solutions to simple computational problems
- Develop and execute simple Python programs.
- Implement programs in Python using conditionals and loops for solving problems.
- Deploy functions to decompose a Python program.
- Process compound data using Python data structures.
- Utilize Python packages in developing software applications.