

# Pimpri Chinchwad Education Trust's Pimpri Chinchwad College of Engineering

### Assignment No 10

**Title:** a calculator for complex numbers.

**Problem Statement:** Implement a Python program calculator for complex numbers.

**Objective:** To explore the use of modules/functions in Python

**Outcome:** Implement modules in the program to simplify problem solutions.

Software Requirements: Windows/Linux (Ubuntu/Fedora) Operating System, Python Tool, Python

IDE Anaconda/ Jupyter notebook/ Google Colab/ any similar

#### Theory:

## Explain below points considering the description, syntax, sample code/ example etc.

- How to define and call the functions in python
- function types
- Use of \* args and \*\*args
- Any additional information

#### Algorithm:

- Start
- Take Input for the First Complex Number
- Take Input for the Second Complex Number
- Define Addition, Subtraction, Multiplication, Division functions for Complex Operations
- Perform Operations Based on User Choice
- If choice = 1: Call add complex(n1, n2) and display result.
- If choice = 2: Call subtract complex(n1, n2) and display result.
- If choice = 3: Call multiply complex(n1, n2) and display result.
- If choice = 4: Call divide complex(n1, n2) and display result.
- If the user selects 0, print "Exiting program..." and terminate.
- If choice is invalid, display an error message and prompt again.
- End

Input & Output: Students will attach code and output print

Conclusion: Students will write interpretation of the understanding related to the implemented assignment