Teaching Guidelines for
# Logic Building & Problem Solving *(optional)*
## PG-DAC September 2022

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**Duration:** 18 hours online sessions + problem solving as self study

**Objective:** This preparatory module is conducted online before the actual PG-DAC course commences for students to learn to think logically and how to solve problems. A number of problems will be given to the students to solve them logically.

**Prerequisites:** Knowledge of computer fundamentals.

**Evaluation:** No separate evaluations. Daily assignment problems are to be solved and submitted.

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*Note: Each day comprises 3 hours' online lecture sessions followed by solving various problems using the topics learnt by the students.*

**Day 1: Building Logic and Solving Problems**
**Lecture:**
    Logical thinking
    Problem solving process
**Assignments:**
    Practice logic building on given problems

**Day 2: Decision making**
**Lecture:**
    If-else, nested if-else, switch case
**Assignments:**
    Decision making problems using if-else, nested if-else, switch case

**Day 3: Control Statements**
**Lecture:**
    Loops
**Assignments:**
    Conditional problems using loops

**Day 4: Modular Programming**
**Lecture:**
    Functions
**Assignments:**
    Problems using functions

**Day 5: Arrays**
**Lecture:**
    Arrays
**Assignments:**
    Problems using arrays

**Day 6: Strings**
**Lecture:**
    Strings
**Assignments:**
    Problems using strings