

### Practice Problems:

- Write a program in c, that calculates sum of the series **2, 4, 6, 8, 10, 12, 14, 16, 18, 20** by using function. The formula for the sum of an arithmetic series:

$$\text{Sum} = (n/2) * [2a + (n-1) d]$$

Where:

- Sum is the sum of the series.
  - n is the number of terms in the series.
  - a is the first term of the series.
  - d is the common difference between consecutive terms.
  - You can plug these values into the formula to calculate the sum of the series.
- Write a C program that calculates the sum of marks for a group of students and then calculates the percentage for each student. The program should perform the following tasks:
    - Create individual variables for at least three different students, representing their student IDs, and marks in mathematics, science, and English.
    - Write a function calculateSumOfMarks that takes the marks in mathematics, science, and English as parameters and returns the sum of their marks.
    - Write a function calculatePercentage that takes the sum of a student's marks as a parameter and calculates and returns the percentage based on the total possible marks for the three subjects (considering the total possible marks as 300).
    - Display the student's details (ID, individual marks of subjects, total marks, and percentage) for each student.
  - You are tasked with creating a simple utility program for a bank teller to calculate the interest earned on a customer's savings account balance. Write a C program that uses functions to perform interest calculations. The program should:
    - Prompt the bank teller to enter the customer's savings account balance.
    - Read the balance from the teller.
    - Write functions for each of the following interest calculations:
      - Calculate simple interest for one year (assume a fixed interest rate i.e., 5%).
      - Calculate compound interest for one year (assume a fixed interest rate i.e., 12%).
      - Calculate compound interest for a specified number of years (taking the interest rate and the number of years as inputs).
    - Display the calculated simple interest and compound interest for one year, as well as the compound interest for a specified number of years to the bank teller.
    - Your program should simulate a utility used by a bank teller to quickly calculate the interest earned on a customer's savings account balance, providing simple and compound interest calculations based on fixed interest rates.