

## **Weekly Assignment 18**

Write a Python program to print the summation of the following series upto N terms-

1.  $1 + (1+4) + (1+4+4^2) + (1+4+4^2+4^3) + \dots$

2.  $3 + 33 + 333 + 3333 + \dots$

3.  $(3^3 - 2^3) + (5^3 - 4^3) + (7^3 - 6^3) + \dots$

4.  $1^2 + (1^2 + 2^2) + (1^2 + 2^2 + 3^2) + \dots$

5.  $\frac{1}{1 \times 3} + \frac{1}{3 \times 5} + \frac{1}{5 \times 7} + \frac{1}{7 \times 9} + \dots$