

## **Week 1 Coding**

**For all programs take input from STDIN**

1. Write a program to display the series 0,0,2,1,4,2,6,3,8,4,.....
2. Write a program to calculate the power of a number.
3. Write a program to calculate the sum of n natural numbers.
4. Write a program to display the sequence 1, 2, 2, 4, 8, 32, 256,.....
5. Write a program to display the sequence 1, 4, 9, 16, 25, 36, 49,.....
6. Write a program to display the sequence 1, 2, 4, 8, 16, 32, 64,.....
7. Write a program to display the sequence 7, 10, 8, 11, 9, 12, .....
8. Write a program to display the sequence 1, 2, 4, 7,11,.....
9. Write a program to display the sequence 1, 1, 5, 5, 9, 9, 13, 13, .....
10. Write a program to display the sequence 21, 9, 21, 11, 21, 13, 21, .....
11. Write a program to display the sequence 14, 28, 20, 40, 32, 64, .....
12. Write a program to display the sequence A1, B2, C4, D8, E16, F32, .....
13. Write a program to display the sequence A1, B2, C3, ....., Y25,Z26, A1, B2,.....
14. Write a program to display the sequence A, Z, X, B, V,.....
15. Write a program to display the sequence BCA1, BCB2, BCC3, BCD4, .....