

## **WEEK 2**

1. Write a Python program that prompts the user to input a number from 1 to 7. The program should display the corresponding day for the given number. For example, if the user types 1, the output should be Sunday. If the user types 7, the output should be Saturday.
2. Write a Python program that prompts the user to input the number of calls and calculate the monthly telephone bills as per the following rule:  
Minimum Rs. 200 for up to 100 calls.  
Plus Rs. 0.60 per call for the next 50 calls.  
Plus Rs. 0.50 per call for the next 50 calls.  
Plus Rs. 0.40 per call for any call beyond 200 calls.
3. Write a program in Python to calculate the factorial of a number.
4. Write a program in Python to calculate the Fibonacci sequence till a specific no. of terms.
5. Write a program in Python to calculate the factors of numbers.
6. Write a program in Python to calculate the magic square based on a given number.
7. Write a program in Python to check if a number is a palindrome.
8. Write a program in Python to check if a number is an Armstrong number.
9. Write a program in Python to check if a number is Krishnamurthy number.
10. Write a program in Python to find the sum of digits of a number.
11. Write a program in Python to reverse a given number.
12. Write a program in Python to find the sum of squares of the first n natural numbers.
13. Write a program in Python to convert a decimal number to a binary number.
14. Write a program in Python that prompts the user to input a number and prints its multiplication table.
15. Write a Python program to print the first 6 terms of a geometric sequence starting with 2 and having a common ratio of 3.