**Week 1 Exercises:**

1. Write a program to calculate the area of a rectangle. The program should prompt the user to enter the length and width of the rectangle and display the result.
2. Write a program that checks whether a given number is even or odd. The program should prompt the user to enter a number and print "Even" or "Odd" accordingly.
3. Write a program that calculates the factorial of a given number. The program should prompt the user to enter a number and display its factorial.
4. Write a program that generates the Fibonacci sequence up to a given number. The program should prompt the user to enter a number and display the Fibonacci sequence.
5. Write a program that checks whether a given year is a leap year. The program should prompt the user to enter a year and print "Leap year" or "Not a leap year" accordingly.

Submit your exercises via email to the course instructor.