Department of Computer Science 2nd Year Bachelor's Degree Computer Architecture

Lab Series No. 2

Exercise No. 1: Calculating the Perimeter and Area of a Rectangle

Create a program in MIPS assembly that reads two integers representing the length and width of a rectangle, entered by the user. The program should then calculate and display the perimeter and area of the rectangle.

Exercise No. 2: Calculating the Average of Three Grades

Write a program in MIPS assembly that reads three grades for a student (Grade1, Grade2, Grade3), then calculates and displays the average of these three grades.

Exercise No. 3: Calculating the Power of a Number

Write a program in MIPS assembly that reads two integers, base and exponent, entered by the user. The program should then calculate the value of base^exponent using successive multiplications and display the result.

Exercise No. 4: Finding the Largest Number in a Series

Write a program in MIPS assembly that reads an integer N, representing the number of values to be entered. The program should then request N integers and determine the largest among them. Finally, it displays the largest number found.

Exercise No. 5: Prime Number Verification

Write a program in MIPS assembly that reads an integer N entered by the user. The program should check if N is a prime number and display the result.