

Exercise Sessions

Session 3: advanced flow control

Get the best from your sequences

May, 25–29 2015, FMB, UNESP, Botucatu, Brasil

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Simple loop control

1. Write a program that reads 10 integers and counts how many of them are less than 0 and how many are greater than 0
2. Write a program that reads integers from the keyboard until the user insert a zero and prints their sum.
3. Write a program that reads integers from the keyboard until the user insert a zero and prints their product.
4. Write a program that reads integers from the keyboard N, and computes the Fibonacci of N (http://en.wikipedia.org/wiki/Fibonacci_number). Given that Fibonacci of N = Fibonacci of (N-1) + Fibonacci of (N-2) and Fibonacci of 0 and 1 are equal to 1

Vector and matrix processing

1. Write a program that reads a dna sequence from keyboard and prints how many adenines are in the sequence.
2. Write a program that reads a vector of integers from keyboard and computes their arithmetic mean.
3. Given a matrix stored in variable M, write a program that tests whether the first row is equal to the last row.
4. Given a matrix stored in variable M, write a program that counts the number of rows that start and end with a number greater than 10.