

Laboratory Exercise 2: Fibonacci sequence

Introduction

The Fibonacci sequence named after the 12th century mathematician Leonardo Fibonacci is characterized by the sum of the two previous integers with seed values 0 and 1. For example

0,1

1, 2, 3, 5, 8, 13, 21, 34, 55, 89, 144

Learning Outcomes:

- Implement an assembly code to generate a Fibonacci sequence.
- Store generated sequence on memory using indirect memory referencing.

Problem Background:

Declare an array of 20 words the data segment using `DUP` directive

Generate a Fibonacci sequence on you code segment and store each item of the sequence into each word element on the word array. Take note that the length of the sequence must depend on the size of the word array.