Laboratory Exercise 3: Fibonacci Initialization

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.
- Initialize memory items with Fibonacci sequences.

Problem Background:

Declare an array of 20 *bytes* on the data segment and initialize it with any value from 1-20. Name this as `InitArray`.

Allocate another 20 *words* of memory on the data segment and name this `FibInit`.

Using the content of `InitArray`, use this as basis to generate a Fibonacci sequence that would be stored on `FibInit`. In which each item of `InitArray` is mapped as Fibonacci sequence (I.e. F(n)) to `FibInit`

Example:

```
InitArray: {8,2,6….}
FibInit: {34,2,13…}
```