 **California State University Long Beach**

**College of Engineering**

**Computer Engineering Computer Science Department**

**Thursday December 6, 2016**

**Computer Architecture**

**Lab Project -3**

**Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

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Problem Definition:

# Problem Definition:

In MARS do the following:

1. Create an array in memory that contains the following numbers:

1 – 2 – 5- 7- 10

1. Write a program that iterate through the array and calculate the factorial
   1. Create a function that recursively calculates the factorial for that number.
2. Analyze and describe the solution.

Problem Solution:

# MARS Commented Source Code:

# Snapshot Outputs (For each part above):

## Register Picture

## Memory Picture

## Console Picture:

# Problem Explanation and behavior.