 **California State University Long Beach**

**College of Engineering**

**Computer Engineering Computer Science Department**

**Thursday November 20, 2016**

**Computer Architecture**

**Lab Project -2**

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

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Problem Definition:

# Problem Definition:

For the MIPS assembly instructions below,

## Program it in MARS

## Explain its behavior

1. Convert the following into code that uses a while loop.

print 2  
prints 4  
prints 6  
prints 8  
prints 10  
prints Goodbye!

**Ex. Python code:**

i = 2

while i <=10:

print (i)

i+=2

print ("Goodbye!")

1. Change the previous program, so instead of just printing the number, it should store it into memory. (Be aware of addressing every integer will take 4 bytes.)

Problem Solution:

# MARS Commented Source Code:

# Snapshot Outputs (For each part above):

## Register Picture

## Memory Picture

## Console Picture:

# Problem Explanation and behavior.