**Bahria University**

**Software Engineering Department**



**Course: CEL-221 Computer Architecture and Organization**

**Term: Fall 2019, Class: BSE 3(B)**

**Assignment No:**

|  |  |
| --- | --- |
| **0** | **2** |

**Submitted By:**

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| **A** | **Q** | **I** | **B** |  | **M** | **E** | **H** | **M** | **O** | **O** | **D** |

**Enrollment No.:**

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| 0 | 2 | - | 1 | 3 | 1 | 1 | 8 | 2 | - | 0 | 1 | 4 |

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| **Submission Date** | | | | | | | |  | **Date Submitted** | | | | | | | |
| **1** | **7** | **/** | **1** | **2** | **/** | **1** | **9** | **1** | **7** | **/** | **1** | **2** | **/** | **1** | **9** |

**Submitted To:**

**Engr. Zohaib Shahzad**

**Signature: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Max Marks: \_\_\_\_\_\_\_\_\_\_\_ Marks Obtained: \_\_\_\_\_\_\_\_\_\_\_\_\_**

**Q:-** *Your task is to solve the puzzle with 4 disks and calculate the minimal number of moves of tower of hanoi?*

Input:-

.data

output: .asciiz "Number of moves with Four disks are : "

error: .asciiz "Invalid Input"

.text

la $a0,output

li $v0,4

syscall

li $t0,1

li $t1,2

li $t2,1

bgtz $t0,moves

la $a0,error

li $v0,4

syscall

moves:

mul $t2,$t2,$t1

addi $t0,$t0,1

blt $t0,5,moves

sub $t2,$t2,1

move $a0,$t2

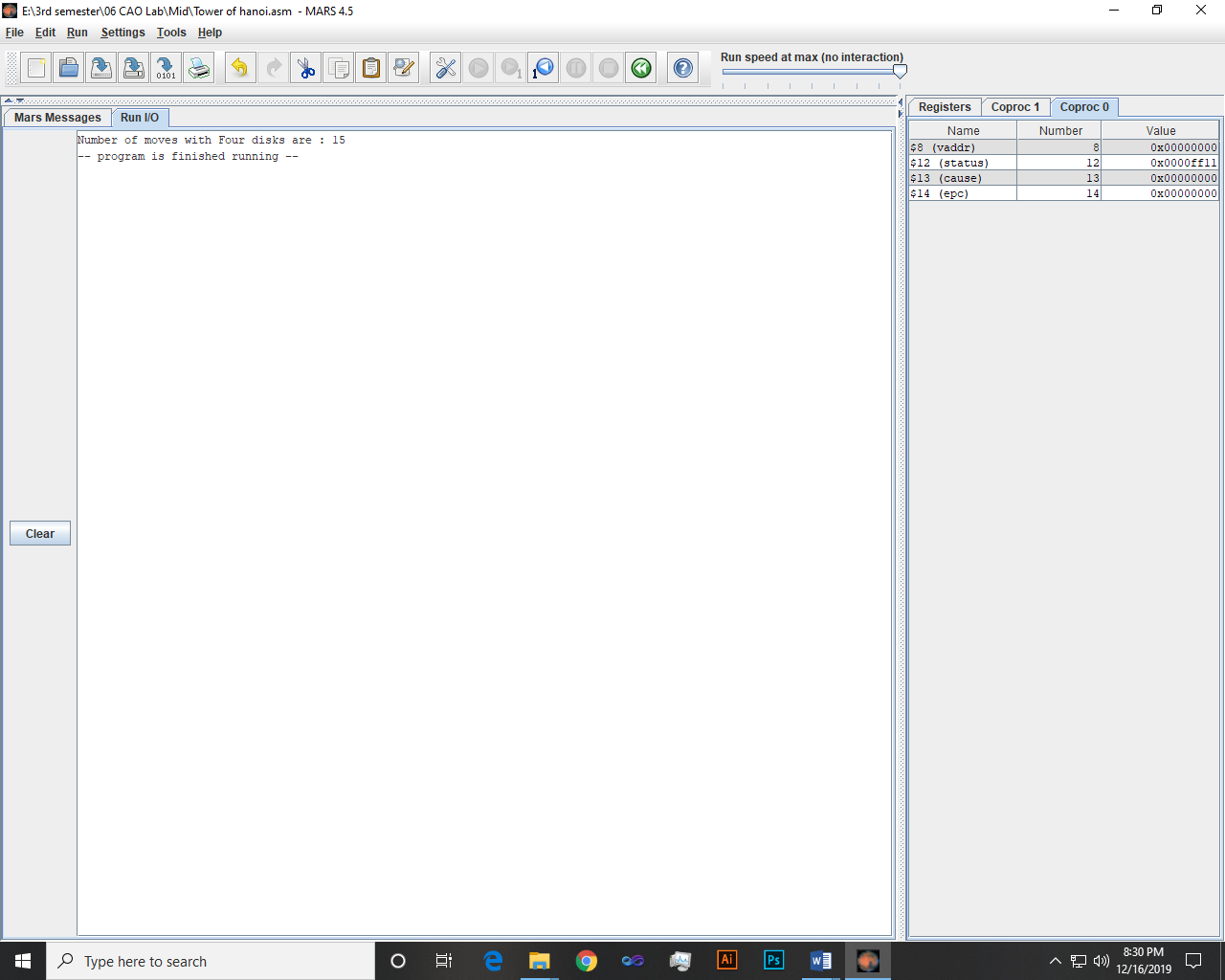
li $v0,1

syscall

li $v0,10

syscall

Output:-



~~~~~~\*\*/**THE END**/\*\*~~~~~~