Bahria University,

Karachi Campus



COURSE: CEL-221 Computer Architecture And Organization

TERM: FALL 2020, CLASS: BSE- 3 (A)

Submitted By:

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(ADIL WAHEED) (65190)

Submitted To:

Engr. Muhammed Rehan Baig

Signed Remarks: Score:

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LAB EXPERIMENT NO.

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LIST OF TASKS

|  |  |
| --- | --- |
| TASK NO | OBJECTIVE |
| 1 | Write a MIPS assembly language program that calculates the  factorials |
| 2 | Write a MIPS assembly language program that Generate table of 5. |
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Submitted On:

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(Date: 08/11/20)

**Task 1: Write a MIPS assembly language program that calculates the**

**Factorials**

**Solution:**

#Write a MIPS assembly language program that calculates the

#factorials

.data

prompt: .asciiz "\n Please Input a value = "

result: .asciiz " The fact of the integers from 1 to N is "

bye: .asciiz "\n \*\*\*\* Have a good day \*\*\*"

.text

.globl main

main:

li $v0,4

la $a0,prompt

syscall

li $v0,5

syscall

blez $v0,end

li $t1,1

li $t0,1

again:mult $t1,$t0

mflo $t1

addi $t0,$t0,1

ble $t0,$v0,again

li $v0,4

la $a0,result

syscall

li $v0,1

move $a0,$t1

syscall

end: li $v0, 4

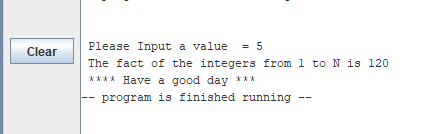
la $a0, bye

syscall

li $v0, 10

syscall

**Output:**

****

**Task 2:** **Write a MIPS assembly language program that Generate table of 5.**

**Solution:**

.data

hello:.asciiz"\n"

table:.asciiz "which number of table do you print \n"

.text

la $a0,table

la $v0,4

syscall

li $v0,5

syscall

li $t0,1

li $t1,11

move $t2,$v0

loop:

beq $t0,$t1,exit

la $v0,4

la $a0,hello

syscall

mul $t3,$t2,$t0

addi $t0,$t0,1

li $v0,1

move $a0,$t3

syscall

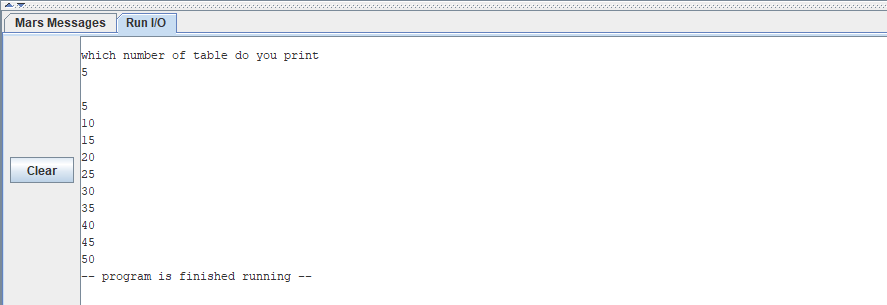
j loop #junp to strat of loop

exit:

li $v0,10

syscall

**Output:**

****