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.

\_\_\_06\_\_\_\_

LIST OF TASKS

|  |  |
| --- | --- |
| TASK NO | OBJECTIVE |
| 1 | **Write the same program with small variation i.e. this time the program will ask for 3 integers twice and displays the result for each addition separately; Output will look like as follows:** |
| 2 | **Write an assembly program that Multiply two number within the range of 10.** |
| 3 | **Write an assembly program that Divide two number within the range of 10.** |
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|  |  |

Submitted On:

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(Date: 30/10/20)

**1.Write the same program with small variation i.e. this time the program will ask**

**for 3 integers twice and displays the result for each addition separately;**

**Output will look like as follows:**

**Enter 3 integers for 1st addition**

**2**

**2**

**2**

**Enter 3 integers for 2nd addition**

**3**

**3**

**3**

**The sum of 1st addition is 6**

**The sum of 2nd addition is 9**

**SOLUTION:**

.data

prompt: .asciiz "Please enter three numbers: \n"

sum\_msg: .asciiz "The sum is: "

.text

la $a0,prompt

li $v0,4

syscall

li $v0,5

syscall

move $t1,$v0

li $v0,5

syscall

move $t2,$v0

li $v0,5

syscall

move $t3,$v0

addu $t1,$t1,$t2

addu $t1,$t1,$t3

la $a0,sum\_msg

li $v0,4

syscall

move $a0,$t1

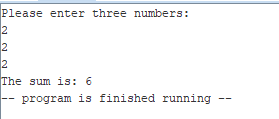
li $v0,1

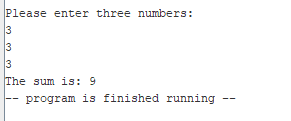
syscall

li $v0,10

syscall

**Output:**

****

****

**2. Write an assembly program that Multiply two number within the range of 10.**

**SOLUTION:**

.data

m: .asciiz "The result of two number is: "

.text

addi $s0, $zero,4

addi $s1, $zero,4

mul $t0, $s0,$s1

la, $a0,m

li $v0,4

syscall

add $a0, $zero,$t0

li $v0,1

syscall

li $v0,10

syscall

**Output:**

****

**3. Write an assembly program that Divide two number within the range of 10.**

**SOLUTION:**

.data

input: .asciiz "Enter Number 1:\n"

input2: .asciiz "Enter Number 2:\n"

remainder: .asciiz "Remainder : "

qout:.asciiz "\nQuotient : "

.text

la $a0,input

li $v0,4

syscall

li $v0,5

syscall

move $t0,$v0

la $a0,input2

li $v0,4

syscall

li $v0,5

syscall

move $t1,$v0

div $t1,$t0

mflo $t2

mfhi $t3

la $a0,remainder

li $v0,4

syscall

move $a0,$t3

li $v0,1

syscall

la $a0,qout

li $v0,4

syscall

move $a0,$t2

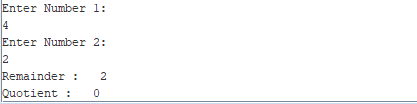
li $v0,1

syscall

li $v0,10

syscall

**Output:**

****