Bahria University,

Karachi Campus

A picture containing text, room

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LAB EXPERIMENT NO.

**8**

LIST OF TASKS

|  |  |
| --- | --- |
| TASK NO | OBJECTIVE |
|  | Write a code which prints the following series:  2 4 8 - - - - n  Write a code which prints the following series:  2 4 8 - - - - n  Write a code which prints the following series:  2 4 8 - - - |
| **1** | **Write a program in MIPS assembly language that takes input and display whether number is prime or not.** |
| **2** | **Write a program in MIPS assembly language that provide the sum from 1 to 99 using for Loop** |
|  |  |
|  |  |

**Practice code 1**

.text

.globl main

main :

li $t0,10

li $a0,0

loop :

add $a0,$a0,$t0

sub $t0,$t0,1

bgez $t0, loop

li $v0,1

syscall

li $v0,10

syscall

Text

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Graphical user interface, application

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**Practice code 2**

.data

print1: .asciiz "enter a number \n"

print2: .asciiz "factorial of \n "

.text

.globl main

main:

li $v0,4

la $a0,print1

syscall

li $v0,5

move $a0,$v0

syscall

li $t0,1

move $t1,$v0

li $t2,1

loop:

bgt $t0,$t1,printsum

mul $t2,$t2,$t0

addi $t0,$t0,1

b loop

printsum:

li $v0,4

la $a0,print2

syscall

li $v0,1

move $a0,$t2

syscall

li $v0,10

syscall

Graphical user interface, text, application, Word

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**Task 1**

.text

.globl main

main :

la $a0,input

li $v0,4

syscall

li $v0,5

syscall

move $t0,$v0

addi $t1,$t0,-1

loop :

rem $t2,$t0,$t1

addi $t1,$t1,-1

bgez $t2,p

bgt $t1,1,loop

la $a0,prime

li $v0,4

syscall

b end

p :

la $a0,notprime

li $v0,4

syscall

b end

la $a0,notprime

li $v0,4

syscall

end:

li $v0,10

syscall

.data

input:.asciiz "\n enter number: "

prime:.asciiz " prime "

notprime:.asciiz" not prime"

Graphical user interface, text, application, email

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**Task 2**

.text

.globl main

main:

move $a0, $0

li $t0, 99

loop:

add $a0, $a0, $t0

addi $t0, $t0, -1

bnez $t0, loop

li $v0, 1

syscall

li $v0, 10

syscall

Graphical user interface, text, application

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Graphical user interface, application

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