(Group 1) deadline Wednesday 26/2/2025

Q1: Trace the following code, predict the desired outputs.
As well as detect any errors and correct these errors.
Fill content of registers after executing the following program

The code	The Answer

```
# Write MIPS Assembly code to do the following:
# the user to give the input number.
# Sample test case: Input: 25
# Output: ..........

data.

msg: .asciiz "enter integer: "
space: .asciiz "

.text
      li $a0, 4
      la $v0, msg
      syscall

      li $v0, 4
      syscall
      move $a1, $v0

      li $t0, 0
      li $a2, 100

      move:
            mul $a0, $a1, $t0
            bge $a0, $a2, endloop
            li $v0, 1
            syscall
            li $v0, 4
            la $a0, space
            syscall
            addi $t0, $t0, 1
            j loop
      endloop:
      li $v0, 10
```

General Registers			
at	=	v0	=
a0	=	a1	=
a2	=	t0	=

Q2: Write a MIPS code program to count odd numbers of an entered array

Note the length of array is at most 30 integer number and enter negative number is a stop condition without reach max number of array elements.

(Group 2) deadline Thursday 4/3/2025

Q1: Trace the following code, predict the desired outputs.
As well as detect any errors and correct these errors.

The code	The Answer

```
# check if integer is
  even or odd

data

msg: .asciiz "enter integer:"
even: .asciiz "\nNumber is even
odd: .asciiz "\nNumber is odd"
.text

main:
      li $v0, 5
      la $a0, msg
      syscall

      li $a0, 4
      syscall

      andi $t0, $v0, 1
      li $v0, 4
      beq $t0, $zero, even_label
      la $a0, odd
      j end_label

      even_label:
            la $a0, even
      addi:
      syscall

      li $v0, 10
```

```
The desired output if input is FE
.....

                    General Registers
               $zero  =          v0  =
                                 a0  =
                                 t0  =
```

Q2: Write a MIPS code program to print minimum and maximum values of an entered array by user , where the array length stored in data segment.

Note the length of array is at most 30 integer number and enter negative number is a stop condition without reach max numbers of array elements.

(Group 3) deadline Thursday 4/3/2025

didn't attend lab

Q1: Trace the following code, predict the desired outputs. As well as detect any errors and correct these errors. **[/5]**

The code	The Answer

```
#Find  my Value
  From an array

array:     .word   15, 71, 22, 3, 4, 9, 6, 11, 6, 80
array_size: .word   10
array_value:  .asciiz \nMyValue " :

.text

main   :
   la $a0, array
   lw $a1, array_size
   lw $t2, $a0

   loop_array:
      beq $a1, $zero, print_and_exit
      lw $t0, ($a0)
      bge $t0, $t2, not_value
      move $t2, $t0
      not:
      addi $a1, $a1, -1
      add $a0, $a0, 4
      j loop_array

   print_and_exit:

   li $v0, 5
   la $a0, array_value
   syscall

   li $v0, 1
   move $a0, $t2


   li $v0, 10
   syscall
```

```
The desired output
.....
```

Q2: Write a MIPS code program to Write a MIPS assembly language program that adds two arrays (element-by-element addition) and prints their sum(as an array).