

### **TASK 01**

```
.data
string1: .ascii "Enter the Table Number = "
string2: .ascii "\n"
a: .word 1
b: .word 1
number: .word 1
s1: .ascii "*"
s2: .ascii "="

.text
lw $t0, a
lw $t1, b
lw $t2, number
    #string1 (TABLE NUMBER)
li $v0, 4
la $a0, string1
syscall
    #input
li $v0, 5
syscall
move $t0, $v0

    #LOOP
loop:
    # compare
beq $t1, 11, Exit

# Multiply
mul $t2, $t0, $t1

    # (a)
move $a0, $t0
li $v0, 1
syscall
    # ( * sign )
li $v0, 4
la $a0, s1
syscall
    # (b)
move $a0, $t1
li $v0, 1
syscall
    # ( = sign )
li $v0, 4
la $a0, s2
syscall
    # NUMBER OUTPUT
move $a0, $t2
```

```

li $v0,1
syscall
    #string 2 (NEWLINE)
li $v0, 4
la $a0 , string2
syscall

    # ( b++)
add $t1, $t1, 1
j loop

Exit:
li $v0, 10
syscall

```

Enter the Table Number = 4	
4*1=4	4*6=24
4*2=8	4*7=28
4*3=12	4*8=32
4*4=16	4*9=36
4*5=20	4*10=40

## **TASK 02**

```

.data
string1: .asciiz "Enter a positive Integer = "
string2: .asciiz "Sum = "
num: .word 0
count: .word 0
sum: .word 0

.text
lw $t0, num
lw $t1, count
lw $t2, sum
    #String1 Enter Integer
li $v0, 4
la $a0, string1
syscall
    #Integer Input
li $v0, 5
syscall
move $t0 , $v0

```

```

loop:
    #Condition
    bge $t1, $t0, exit

    #Increment
    add $t1, $t1, 1

    # Sum Calculation
    add $t2, $t2, $t1

j loop
exit:

#string SUM =
li $v0, 4
la $a0, string2
syscall

#Print Sum
move $a0, $t2
li $v0, 1

syscall
li $v0, 10
syscall

Enter a positive Integer = 5
Sum = 15
-- program is finished running --

```

### **TASK 03**

```

.data
string1:.asciiz "\n"

i:.word 0

.text

lw $t0, i
    # i=15 initialization
add $t0, $t0, 15

```

```

# OUTPUT Starting from 15
move $a0, $t0
li $v0,1
syscall

#newline
li $v0,4
la $a0, string1
syscall

loop:
    # i>0
blez $t0, exit

    #i-=2
sub $t0, $t0, 2

    # after -2
move $a0, $t0
li $v0,1
syscall

#newline
li $v0,4
la $a0, string1
syscall

j loop
exit:
li $v0, 10
syscall

```

```

15
13
11
9
7
5
3
1

```