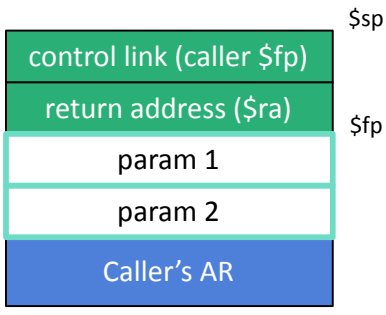
HOMEWORK 9

Question 1:

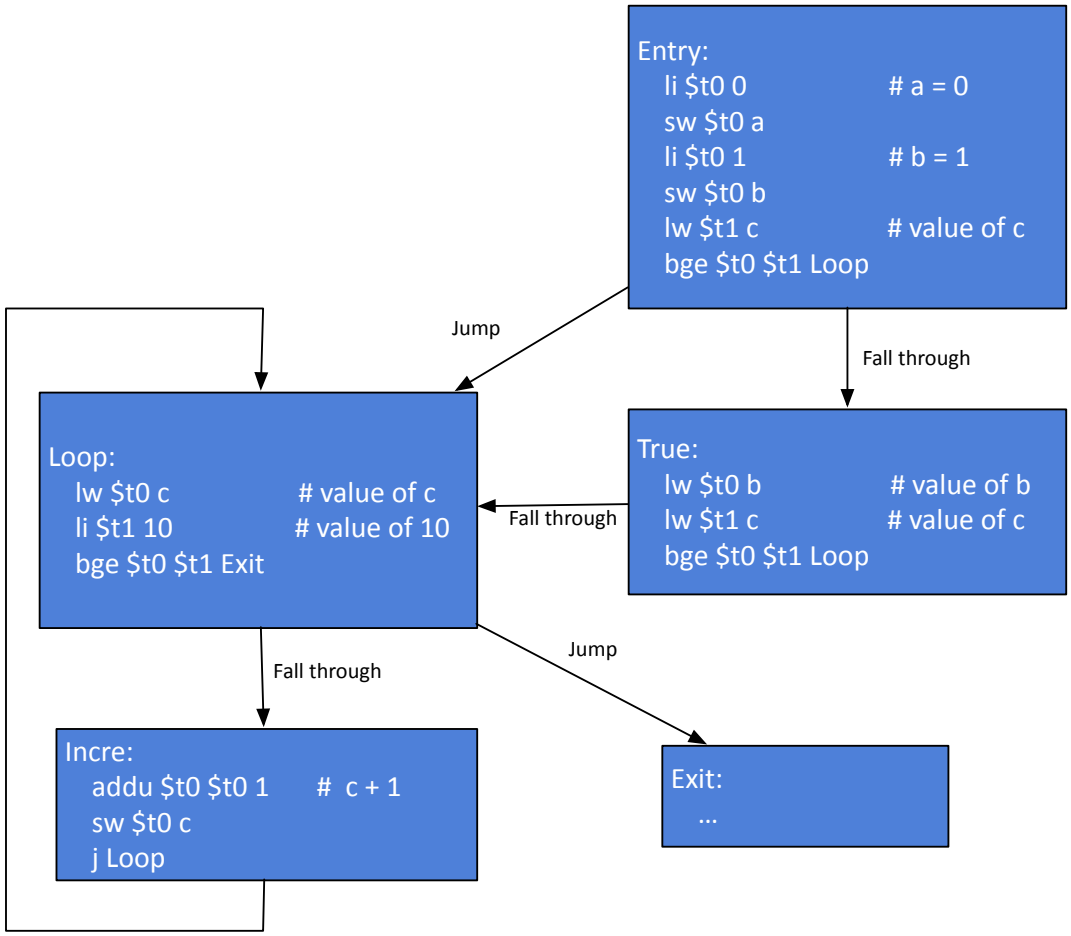
```
sw $ra 0($sp) # push $ra into stack
subu $sp $sp 4
sw $fp 0($sp) # push $fp into stack
subu $sp $sp 4
addu $fp $sp 8 # update $fp
lw $t1 4($fp) # load b
lw $t0 8($fp) # load a
add $t0 $t0 $t1 # push a + b
sw $t0 0($sp)
subu $sp $sp 4
# exit
lw $v0 – 8($fp) # store the return value (a + b) in $v0
lw $ra 0($fp) # restore return address to $ra
move $t0 $fp # store old $fp address
lw $fp – 4($fp) # restore caller's $fp
move $sp $t0 # restore $sp
jr $ra # jump to return address
```

Convention:

1. $v0 is used for return value
2. Parameters are stored as following



Question 2:




## Question 3

$\$t0 = 3$

$\$t1 = 2$

$\$t2 = 8$

$\$t3 =$ undefined

$\$ra = 0x0$

$PC = 0x0$