```
# Lucas Hasting
#$t4 is the bulk price
#$t3 is shipping cost

begginning:
#initilize memory values
addi $t0, $zero, 8196
addi $t1, $zero, 8192

#check/load input
lw $t1, 0($t1)
beq $t1, $zero, end
lw $t0, 0($t0)

#run sub-routines
jal bulk_price
jal shipping_cost

#add bulk price and shipping cost
add $t5, $t3, $t4
addi $t2, $zero, 8200

#load vlaue to output
sw $t5, 0($t2)

#loop if there is input
bne $t1, $zero, begginning

#bulk_price sub-routine
```

```
bulk_price:
#$t0 = input

#check if statements
addi $t1, $zero, 6
slt $t2, $t0, $t1
addi $t3, $zero, 8
beq $t2, $zero, conditionBP2

#if ($t0 < $t1)
# $t0 * 8
mul $t4, $t0, $t3
j end_BP

#if !($t0 < $t1)
conditionBP2:

#(((($t0-5) * 5) + (5*8))
add $t5, $zero, $t0
addi $t5, $t0, -5
addi $t4, $zero, 5
mul $t5, $t5, $t4
mul $t4, $t4, $t3
add $t4, $t4, $t5
end_BP:
jr $ra

shipping_cost:
#$t0 = input
```

```
#itilize $t1 with 10
addi $t1, $zero, 10

#check if statements
slt $t2, $t1, $t0
bne $t2, $zero, conditionSC2

#if (10 < $t0)
#shipping_cost = $t0 + 5
addi $t3, $t0, 5
j end_SC

#if !(10 < $t0)
conditionSC2:

#shipping_cost = 15
addi $t3, $zero, 15
end_SC:
jr $ra

end:
```

Registers

$zero	0
$t0	8196
$t1	0
$t2	8200
$t3	15
$t4	115
$t5	130
$t6	0
$ra	28

Data memory

5000	0	
5004	0	
5008	0	
8192	0	InputReady
8196	20	InputValue
8200	130	OutputValue

Input

5 6 9 10 20

Output

```
50 56 74 80
130 _
```