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COA LAB (2017 -18, I)

QUIZ 1 - SET 6

Compute sum of all even numbers in an array of length 10 and starting at memory address 100. Store the sum at memory location 150.

MOV R5, #10

MOV R0, #0

MOV R10, #100

Loop:

~~MOV @R10, R1~~

~~MOV R1, @R10~~

//Transfer data in R1 from address 100 using indirect memory addressing

MOV R1, R2

AND R2, #1

0 even
1 odd

~~CMP R2, #0~~

//Compare

JE L0

L1:

INR R10

DCR R5

~~CMP #0, R5~~

//Compare

JNE Loop

~~MOV R11, #150~~

~~MOV @R11, R1~~

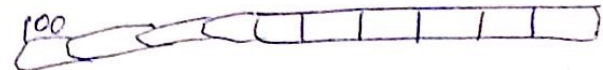
//Store result

HLT

L0:

~~ADD R11, R2~~

~~JMP L1~~



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