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Roll - 46

Q1

$$t = a + b$$

$$u = c + d$$

$$V = t + u$$

$$w = t + V$$

Computing order it gives: t, u, V, w
 \therefore Order = $u - V - t - w$

System restriction Number of registers
 is 02. $[R_0, R_1]$

Instruction		Cost	Register	Address descriptors
mov A, R0	$R_0 = A$	2	R0 continue	t is in R0
ADD B, R0	$R_0 = A + B$	$2 + 1$		
mov C, R1	$R_1 = C$	2	R1 Cont	u is R1
ADD D, R1	$R_1 = C + D$	$2 + 1$		t is in R0
mov R0, t	R0 empty	2	R0 Contain V	V is in R0
mov E, R0	$R_0 = R_0 + R_1$	2	R1 Contain u	V is in R1
ADD R0, R1	$E + (C + D) = V$	2		
mov t, R1	$R_1 = A + B(t)$	2	R0 Contain	V is in R0
ADD R1, R0	$R_1 = R_1 + R_0$	1	R1 Contain	W is in R1
mov R1, w		2	W	
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