

I. Tracing

The initial contents of the MIPS registers and some memory locations are shown below. Each question is independent of each others, so for every question, always refer to the initial state. All values are in **hexadecimal** notation. All answers should also be written in **hexadecimal** notation. If there is an invalid syntax in one of the instructions, then write "ERROR". If answers could not be obtained due to lack of given, then write "N/A". Write your answer in the blank provided

- A.) LUI R7, #2345  
ORI R7, R7, #5678  
1.) R7=? FFFF FFFF 2345 0008
- B.) DADDIU R4, R0, #0008  
DMTC1 R4, F6  
CVT.D.L F8, F6  
2.) R4=? 0000 0000 0000 0008  
3.) F6=? 0000 0000 0000 0008  
4.) F8=? 0000 0000 0000 0008
- C.) DADDIU R5, R0, #0004  
MTHI R0  
MTLO R5  
MADD R5, R5  
5.) R5=? 0000 0000 0000 0004  
6.) hi=? 0000 0000 0000 0000  
7.) lo=? 0000 0000 0000 0004
- D.) DADDIU R8, R0, #FFFC  
DADDIU R9, R0, #FFFE  
DDIV R8, R9  
8.) hi=? 0000 0000 0000 0000  
9.) lo=? FFFF FFFF FFFF FFFE
- E.) DADDIU R6, R0, #0008  
DADDIU R8, R0, #000A  
DMTCI R6, F6  
DMTCI R8, F8  
CVT.D.L F6, F6  
CVT.D.L F8, F8  
C.EQ.D 7, F6, F8  
10.)CC(7) = ? 0000 0000 0000 0001
- F.) DADDIU R6, R0, #0008  
DADDIU R8, R0, #000A  
SLT R10, R6, R8  
BNEZ R10, L1  
11.)R10=? 0000 0000 0000 0001  
12.)Will it jump? No
- G.) DADDIU R6, R0, #1234  
DSLL R8, R6, #0008  
13.)R8=? 0000 0000 0012 3400
- H.) XORI R8, R0, #2222  
XOR R9, R6, R6  
14.)R8=? 0000 0000 0000 2222  
15.)R9=? 0000 0000 0000 0000