Test Cases			
Instruction	**Assembly Code**	**Expected Result**	**Test Condition**
MOV AL r0,#1 ADD AL r1,r0 SYS AL	4001 0110 9800	 r1 = 1	Tests register dependence on Op2 register
MOV AL r0,#4 ADD AL r0,r1 SYS AL	4004 0101 9800	 r0 = 4	Tests register dependence on Rd register
MUL S r0,#0 MOV EQ r1,#1 ADD AL r1,r0 SYS AL	4a00 4411 0110 9800	 r1 = 1	Tests condition code dependence & register dependence with a buffer instruction
MOV S r0,#0 MOV NE r1,#2 MOV AL r1,#4 MOV AL r0,r1 SYS AL	4200 4612 4014 4101 9800	 r0 = 4	Tests condition code dependence (with CC not being met) & register dependence
MOV AL r0,#2 MOV AL r1,#5 MOV S r2,#0 MUL EQ r0,r1 MOV AL r2,r0 SYS AL	4002 4015 4220 4d01 4120 9800	 r2 = 10	Tests condition code (with CC being met) and tests the MUL operation
MOV AL r0,#5 MOV AL r1,#1 STR AL r0,[r1] LDR AL r2,[r1] SYS AL	4005 4011 7901 3921 9800	 r2 = 5	Tests memory dependence
MOV AL r0,#6 MOV AL r1,#1 MOV S r2,#0 STR EQ r0,[r1] LDR AL r3,[r1] SYS AL	4006 4011 4220 7d01 3931 9800	 r3 = 6	Tests memory dependence in tandem with conditional execution

Instruction	Machine Code	Result	Comment
ADD AL r0, #6	0006		
ADD AL r1, #1	0011		
MOV AL r15, #6	40f6		
SYS AL	9800		
SYS AL	9800		
SYS AL	9800		
ADD AL r1, r0	0110		
ADD AL r0, #5	0005		
ADD AL r0, #6	0006		
ADD AL r0, #5	0005		
ADD AL r1, r0	0110	r0=22; r1=29	Jumps
PRE AL #1	c001		
PRE AL #2	c002		
ADD AL r0, #1	0001		Two PRE's in a
SYS AL	9800	r0=33	row
TOF AL r0,#6	3006		
ITOF AL r1,#0	3010	reg0 = 4'x40c0	
ITOF AL r2,#-3	302d	reg1 = 4'x0	
ITOF AL r3,#-7	3039	reg2 = 4'xc040	
SYS AL	9800	reg3 = 4'c0e0	Basic ITOF
	c002		
	300a		
ITOF AL r0,#42	cff8		
ITOF AL r1,#-117	301b	reg0 = 0x4228	
SYS AL	9800	reg1 = 0xc2ea	Large # ITOF
ITOF AL r0,#6	3006		
MOV AL r1, #0	4010		
FTOI AL r2, r0	2920	reg0 = 4'x40c0	
SYS AL	9800	reg2 = 4'x0006	Basic FTOI
	cff8		
ITOF AL r0,#-117	300b		
MOV AL r1, #0	4010		
FTOI AL r2, r0	2920	reg0 = 4'xc2ea	Negative and
SYS AL	9800	reg2 = 4'xff8b	Large FTOI
ITOF AL r0,#5	3005		
ITOF AL r1, #6	3016		
MULF AL r0, r1	5101	reg0 = 16'b0100000111110000	
FTOI AL r2, r0	2920	reg1 = 16'b0100000011000000	
SYS AL	9800	reg2 = 16'b0000000000011110	Basic MULF

	cfff		
ITOF AL r0,#-10	3006		
ITOF AL r1,#7	3017		
MULF AL r0, r1	5101	reg0 = 16'b1100001010001100	MULF on a
FTOI AL r2, r0	2920	reg1 = 16'b0100000011100000	Positive and
SYS AL	9800	reg2 = 16'b1111111110111010	Negative Float
	cffe		
	300b		
ITOF AL r0,#-21	cffe		
ITOF AL r1,#-20	301c		
MULF AL r0, r1	5101	reg0 = 16'b0100001111010010	MULF on Two
FTOI AL r2, r0	2920	reg1 = 16'b1100000110100000	Large Negative
SYS AL	9800	reg2 = 16'b0000000110100100	Values
ITOF AL r0,#5	3005		
RECF AL r1,r0	6910	reg0 = 16'b0100000010100000	
SYS AL	9800	reg1 = 16'b0011101101001100	RECF
	cffc		
ITOF AL r1, #-50	301e		
FTOI AL r0, r1	2901	reg0 = 16'b1111111111001110	
SYS AL	9800	reg1 = 16'b1100001001001000	FTOI on -50

Result Achieved
yes
yes
yes
yes
yes
yes
yes

yes
yes
yes
yes
yes
yes
yes

yes
yes
does not match up with precise reciprocal value
no; reg0[14] turns out to be equal to 0 instead of 1