INSTRUCTION LIST :

LD F2 45(R1) LD F6 34(R2) ADDD F0 F8 F10 ADDD F4 F10 F10 SUBD F8 F4 F6 ADDD F10 F0 F0

Clock cycle : 0

				TIMIN	IG TABLE				
 PC	, ,	INSTRI	JCTION	ISSUED	STARTED	FIN	~~~~~~~ ISHED	Write CDB	~~~
0		LD F2	45(R1)	-	-		-	-	
1			34(R2)	-	-		-	-	
2			9 F8 F10	-	-		-	-	
3		ADDD F4	F10 F10	-	-		-	-	
4		SUBD F	8 F4 F6	-	-		-	-	
5		ADDD F	10 F0 F0	-	-		-	-	
·~~~~	~~~~	,~~~~~~~	~~~~~~~	~~~~~~~~ Reservati	on Station	~~~~~~~	~~~~~~~	~~~~~~~~~~~	~~~
~~~~~~ Time lef	,~~~~ :+	~~~~~~~ Tag	0P	~~~~~~~ Busy	valueJ	valueK	~~~~~~~ Qj		~~~
TING TO		Add0	OI .	False	Value3	Valuek 0	ري	ζıν	
		Add1		False	0	0			
		Add1 Add2		False	0	0			
		Mult0		False	0	0			
		Mult1		False	0	0			
~~~~~	,~~~~	,~~~~~~~ Loa		~~~~~~~~					
~~~~~~ Time lef				^^~~~~~~~~~~~					
Time Ter	·	Tag Load0	Busy False	Address					
		Loado Load1	False						
		Load1 Load2	False						
		Load3	False						
		Load4	False						
		Load5	False						
		LUGUJ	1 0136						
~~~~~	,~~~~~	,~~~~~~~	·~~~~~~~	~~~~~~~~ Reg			~~~~~~~	~~~~~~~~~~~	~~~
 Name Qi	 	,~~~~~~~ F1			gister ~~~~~~~		~~~~~~~ F8	.~~~~~~~~ .~~~~~~~~~ F9	~~~

Clock cycle : 1

PC : 0

NEXT FP INSTRUCTION TO BE ISSUED: 'LD F2 45(R1)'

		TIMING	TABLE		
PC	INSTRUCTION	ISSUED	STARTED	FINISHED	Write CDB
0	LD F2 45(R1)	1	-	-	-
1	LD F6 34(R2)	-	-	-	-
2	ADDD F0 F8 F10	-	-	-	-
3	ADDD F4 F10 F10	-	-	-	-
4	SUBD F8 F4 F6	-	-	-	-
5	ADDD F10 F0 F0	-	_	-	_
~~~~~~~	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
		Reservatio	on Station		
.~~~~~~		Reservatio	on Station		
.~~~~~~		Reservatio	on Station	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	
	vaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaa	Reservatio	on Station valueJ	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	
~~~~~~~	Tag OP	Reservation Reservation Reservation Rusy False	on Station valueJ	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	
~~~~~~~	Tag OP Add0 Add1	Reservation Busy False False	on Station valueJ	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	

~~~~~~~~~	~~~~~~~	~~~~~~~	~~~~~~~
Time left	Tag	Busy	Address
2	Load0	True	45+R1
	Load1	False	
	Load2	False	
	Load3	False	
	Load4	False	
	Load5	False	

~~~~~~~	~~~~~~	~~~~~~	~~~~~~~	~~~~~~	~~~~~~~	~~~~~~	~~~~~~~	~~~~~~~	~~~~~~	~~~~~~~	~~~~~~~~
					Regi	ster					
~~~~~~~	~~~~~~		~~~~~~	~~~~~~	.~~~~~~	~~~~~~	~~~~~~	.~~~~~~	~~~~~~	~~~~~~~	~~~~~~~
Name	FØ	F1	F2	F3	F4	F5	F6	F7	F8	F9	
Qi			Load0								
Value	6.0	0.0	3.5	0.0	10.0	0.0	0.0	0.0	7.8	0.0	

Clock cycle : 2

PC : 1

NEXT FP INSTRUCTION TO BE ISSUED: 'LD F6 34(R2)'

			TIMING	G TABLE				
PC	INSTF	RUCTION	ISSUED	STARTED	FIN	NISHED	Write	CDB
0	LD F2	2 45(R1)	1	2		-	-	
1	LD F6	5 34(R2)	2	-		-	-	
2		0 F8 F10	-	-		-	-	
3		F10 F10	-	-		-	-	
4		8 F4 F6	-	-		-	-	
5	ADDD F	F10 F0 F0	-	-		-	-	
u~~~~~~	~~~~~~~~~~		Reservatio	~~~~~~~ on Station	~~~~~~~~		,~~~~~	~~~~~
Time left	~~~~~~~~ Tag	OP	Busy	valueJ	valueK	 Qj		Qk
	Add0		False	0	0			
	Add1		False	0	0			
	Add2		False	0	0			
	Mult0		False	0	0			
	Mult1		False	0	0			
	Loa	ad Station						
Time left	Tag	Busy	Address					
1	Load0	True	45+R1					
2	Load1	True	34+R2					
	Load2	False						
	Load3	False						
	Load4	False						
	Load5	False						
	~~~~~~~~~~		Reg	~~~~~~~ ister	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		,~~~~~	~~~~~
Name Qi	F0 F1	F2 Load0	F3 F4	F5 Lo	F6 F7 ad1	F8	F9	
/alue	6.0 0.0	3.5	0.0 10.0	0.0	.0 0.0	7.8	0.0	

Clock cycle : 3

PC : 2

NEXT FP INSTRUCTION TO BE ISSUED: 'ADDD F0 F8 F10'

Instruction 'ADDD F0 F8 F10' ISSUED at clock 3 in 'Add0'
Instruction 'LD F6 34(R2)' STARTED at clock 3 in 'Load1'

		TIMIN	G TABLE		
~~~~~~~~~~	~~~~~~~~~~~~~~~~	~~~~~~~~~~~	~~~~~~~~~	~~~~~~~~~~~~~~	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
PC	INSTRUCTION	ISSUED	STARTED	FINISHED	Write CDB
0	LD F2 45(R1)	1	2	-	-
1	LD F6 34(R2)	2	3	-	-

2 3 4 5	ADDD F4 SUBD F	0 F8 F10 F10 F10 8 F4 F6 10 F0 F0	3 - - -	- - -	- - - -	- - -	- - -	
~~~~~~~		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Reservatio	n Station		.~~~~~~		~~~~
Time left 1	Tag Add0 Add1 Add2 Mult0 Mult1	OP ADDD	Busy True False False False False	valueJ 7.8 0 0 0 0	valueK 0.0 0 0 0 0	Qj	Qk	
~~~~~~~	Loa	d Station	~~~~~~~~~					
Time left Ø 1	Tag Load0 Load1 Load2 Load3 Load4 Load5	Busy True True False False False False	Address 45+R1 34+R2					
			~~~~~~~~ Regi	ster				~~~
Name Qi Value	F0 F1 Add0 6.0 0.0	F2 Load0 3.5	F3 F4 0.0 10.0	F5 F6 Load	<b>i</b> 1	F8	F9 0.0	~~~
nstruction nstruction	'ADDD F4 F10 F10' 'ADDD F0 F8 F10' 'LD F2 45(R1)' FI	STARTED at clo	ock 4 in 'Add0'	.~~~~~~~~~~	~~~~~~~~~~	~~~~~~~	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	~~~~
~~~~~~~	,~~~~~~~~~~	,~~~~~~~~	TIMING	TABLE			·~~~~~~~~~~~~~~~	~~~~
PC 0 1 2 3 4 5	LD F2 LD F6 ADDD F ADDD F4 SUBD F	EUCTION 2 45(R1) 5 34(R2) 60 F8 F10 1 F10 F10 8 F4 F6 10 F0 F0	ISSUED 1 2 3 4 -	STARTED 2 3 4	FIN] 2	ISHED I	Write CDB - - - - - -	
	,~~~~~~~~	,~~~~~~~~~	Reservatio				~~~~~~~~~~~~~~~~~	~~~~
Time left Ø 1		OP ADDD ADDD	Busy True True False False False	valueJ 7.8 0.0 0 0	valueK 0.0 0.0 0 0	Qj	Qk	~~~~
~~~~~~	,~~~~~~~~~~~~							
	Loa	d Station						
Time left	Loa	d Station						
Time left	Load2 Load4	d Station  Busy True True False False False	Address 45+R1 34+R2	.~~~~~~~~.ster	unnanananananananananananananananananan	unnnannnar	unnannannannannannannannannannannannanna	~~~~

Qi Add0 Load0 Add1 Load1 Value 6.0 0.0 3.5 0.0 0.0 7.8 0.0

Clock cycle : 5

PC : 4

NEXT FP INSTRUCTION TO BE ISSUED: 'SUBD F8 F4 F6'

Instruction 'SUBD F8 F4 F6' ISSUED at clock 5 in 'Add2' Instruction 'ADDD F4 F10 F10' STARTED at clock 5 in 'Add1' Instruction 'LD F6 34(R2)' FINISHED at clock 5 in 'Load1'

Instruction 'ADDD F0 F8 F10' FINISHED at clock 5 in 'Add0'

Instruction 'LD F2 45(R1)' BROADCASTED in CDB at clock 5 with value '47.0'

						TABLE					
~~~~~~ PC	~~~~~	INSTRU	-~~~~~ JCTION	 ISSU		STARTE		FIN:	·~~~~~ ISHED	~~~~~~ Writ	e CDB
0		LD F2	45(R1)	1		2			4		5
1			34(R2)	2		3		!	5		-
2		ADDD F	7 F8 F10	3		4		!	5		-
3		ADDD F4	F10 F10	4		5			-		-
4		SUBD F8	3 F4 F6	5		-			-		-
5		ADDD F1	L0 F0 F0	-		-			-		-
~~~~~~	·~~~~		~~~~~~~			on Station	~~~~~	~~~~~~	~~~~~~	~~~~~	
~~~~~~~ Time left	,~~~~ :	~~~~~~ Tag	 OP		~~~~~~ Busy	valueJ	~~~~	~~~~~~~~ valueK	·~~~~~ Qj	~~~~~	Qk
0		Add0	ADDD	7	rue	7.8		0.0	_		
0		Add1	ADDD	7	rue	0.0		0.0			
2		Add2	SUBD		rue	10.0		0.0	Add1		Load1
		Mult0			alse	0		0			
		Mult1		F	alse	0		0			
·~~~~~~	~~~~		 d Station	,~~~~~~	~~~~~						
Time left		Tag Load0	Busy False		ldress						
		Loado Load1	True		34+R2						
		Load1 Load2	False	-	· τ Ι\Δ						
		Load3	False								
		Load4	False								
		Load5	False								
·~~~~~	~~~~			~~~~~	Regi	ster	~~~~	~~~~~~	·~~~~~~	~~~~~	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
Name Qi	F0 Add0	F1	F2	F3	F4 Add1	F5	F6 Load1	F7	F8 Add2	F9	,~~~~~~
/alue	6.0	0.0	47.0	0.0	10.0	0.0	0.0	0.0	7.8	0.0	

					Regi	ster					
~~~~~~~	~~~~~~	~~~~~~	~~~~~~	~~~~~~	~~~~~~	~~~~~~	~~~~~~	~~~~~~	~~~~~~	~~~~~~~	~~~~~~
Name	FØ	F1	F2	F3	F4	F5	F6	F7	F8	F9	
Qi	Add0				Add1		Load1		Add2		
Value	6.0	0.0	47.0	0.0	10.0	0.0	0.0	0.0	7.8	0.0	

Clock cycle : 6

PC : 5

NEXT FP INSTRUCTION TO BE ISSUED: 'ADDD F10 F0'

Instruction 'ADDD F0 F8 F10' FINISHED at clock 6 in 'Add0'
Instruction 'ADDD F4 F10 F10' FINISHED at clock 6 in 'Add1'

Instruction 'LD F6 34(R2)' BROADCASTED in CDB at clock 6 with value '37.5'

		TIMIN	G TABLE		
~~~~~~~~~	~~~~~~~~~~~~~~~~~~~~		~~~~~~~~~~~	~~~~~~~~~~~~~~	~~~~~~~~~~~~~~~~~~
PC	INSTRUCTION	ISSUED	STARTED	FINISHED	Write CDB
0	LD F2 45(R1)	1	2	4	5
1	LD F6 34(R2)	2	3	5	6
2	ADDD F0 F8 F10	3	4	5	-
3	ADDD F4 F10 F10	4	5	6	-
4	SUBD F8 F4 F6	5	-	-	-
5	ADDD F10 F0 F0	-	-	-	-

Time le	ft	Tag	OP	Busy	valueJ	valu	eK	Qj	Qk
0		Add0	ADDD	True	7.8	0.	0	cs	•
0		Add1	ADDD	True	0.0	0.	0		
2		Add2	SUBD	True	10.0	37.		Add1	
		Mult0		False	. 0	0			
		Mult1		False	0	0			
.~~~~~		Load	Station						
Time le		Tag	Busy	Addres					
		Load0	False						
		Load1	False						
		Load2	False						
		Load3	False						
		Load4	False						
		Load5	False						
	~~~~~	~~~~~~~	.~~~~~~~	.~~~~~~	Register	,~~~~~~~~	~~~~~	~~~~~~	
~~~~~~	~~~~~	~~~~~~~			~~~~~~~	~~~~~~~	~~~~~	~~~~~~	
Name	FØ	F1	F2	F3 F	4 F5	F6	F7	F8	F9
Qi	Add0			Ad	ld1			Add2	

0.0

37.5

7.8

0.0

Clock cycle : 7

PC : 5

Value

6.0

NEXT FP INSTRUCTION TO BE ISSUED: 'ADDD F10 F0 F0'

0.0

Instruction 'ADDD F10 F0 F0' ISSUED at clock 7 in 'Add0'
Instruction 'ADDD F4 F10 F10' FINISHED at clock 7 in 'Add1'

Instruction 'ADDD F0 F8 F10' BROADCASTED in CDB at clock 7 with value '7.8'

47.0

0.0

10.0

				IMING TABLE				
-~~~~~ PC		TRUCTION	ISSUED	STARTED		FINISHED	Write CDB	~~~
0	LD I	F2 45(R1)	1	2		4	5	
1	LD I	F6 34(R2)	2	3		5	6	
2	ADDD	F0 F8 F10	3	4		5	7	
3	ADDD	F4 F10 F10	4	5		6	-	
4		F8 F4 F6	5	-		-	-	
5	ADDD	F10 F0 F0	7	-		-	-	
·~~~~~	.~~~~~~~~	~~~~~~~~	Reser	vation Station		~~~~~~~	~~~~~~~~~	~~~
Time left	U	OP	Busy	valueJ	valueK	~~~~~~~ Qj	Qk	~~~
1	Add0	ADDD	True	7.8	7.8			
0	Add1	ADDD	True	0.0	0.0			
2	Add2	SUBD	True	10.0	37.5	Add1		
	Mult0 Mult1		False False		0 0			
	Multi		raise	0	Ø			
		oad Station	~~~~~~~	~~~				
Time left		Busy	Addres	~~~ S				
	Load0	False						
	Load1	False						
	Load2	False						
	Load3	False						
	Load4	False						
	Load5	False						
~~~~~	.~~~~~~~~	~~~~~~~~	~~~~~~~	Register	.~~~~~~~~	~~~~~~~~		~~~
Name	F0 F1	F2	F3 F	4 F5	F6 F7		F9	~~~
Qi	7.8 0.0	47.0	0.0 Ad			Add2	0.0	

 Instruction 'ADDD F10 F0 F0' STARTED at clock 8 in 'Add0'
Instruction 'ADDD F4 F10 F10' BROADCASTED in CDB at clock 8 with value '0.0'

						G TABLE					
	~~~~~~	TNSTRI	JCTION		SUED	START	~~~~~ FD	~~~~~~~ ETN	~~~~~~ ISHED	۔۔۔۔۔ ا اداما	 te CDB
0			45(R1)		1	2	LU		4	WII	5
1			34(R2)		2	3			5		6
2					3	4			5		7
			0 F8 F10		_	=					7
3	,		F10 F10		4	5			6		8
4			8 F4 F6		5	-			-		-
5		ADDD F	10 F0 F0		7	8			-		-
·~~~~~~	.~~~~~~	·~~~~	~~~~~~	·~~~~	Reservatio	on Station	~~~~~	.~~~~~~	~~~~~~	~~~~~~	~~~~~~~~~
Time left		~~~~~ ag	 OP	~~~~~	Busy	valueJ	~~~~~	valueK	~~~~~~ Qj	~~~~~	Qk
0	Ado		ADDD		True	7.8		7.8	۲۶		δι.
J	Add		מטטה		False	0		0			
1	Add		SUBD		True	0.0		37 . 5			
1		uz lt0	2000		False	0.0		0			
		lt1			False	0		0			
	Mu.				raise	ð		0			
.~~~~~~	~~~~~~		d Station	~~~~~	~~~~~						
Time left		~~~~~ ag	Busy		Address						
		ad0	False		,						
		ad1	False								
		ad2	False								
		ad3	False								
		ad4	False								
		ad5	False								
J~~~~~~~	.~~~~~~	·~~~~	~~~~~~	~~~~~		 ister	~~~~~	,~~~~~~	~~~~~~	~~~~~	·~~~~~~~
Name Qi	F0	F1	F2	F3	F4		 F6	F7	~~~~~~ F8 Add2	~~~~~ F9	~~~~~~~~~
Value	7.8	0.0	47.0	0.0	0.0	0.0	37.5	0.0	7.8	0.0	

				TABLE			
~~~~~~~ PC	INSTRU		ISSUED	STARTED	FINI	SHED	Write CDB
0	LD F2	45(R1)	1	2	4		5
1	LD F6	34(R2)	2	3	5		6
2	ADDD F6	F8 F10	3	4	5		7
3	ADDD F4	F10 F10	4	5	6		8
4	SUBD F8	F4 F6	5	9	-		-
5	ADDD F10 F0 F0		7	8	9		-
~~~~~~		~~~~~~~	Reservatio	n Station		·~~~~~	~~~~~~~~~~~
Time left	Tag	OP	Busy	valueJ	valueK	Qj	Qk
0	Add0	ADDD	True	7.8	7.8		
	Add1		False	0	0		
0	Add2	SUBD	True	0.0	37.5		
	Mult0		False	0	0		
	Mult1		False	0	0		
	Load	Station	~~~~~~~				
~~~~~~~ Γime left		Busy	Address				
	Load0	False					
	Load1	False					
	Load2	False					
	Load3	False					
	Load4	False					

Load5 False

~~~~~~~												
Register												
Name	F0	F1	F2	F3	F4	F5	F6	F7	F8	F9		
Qi									Add2			
Value	7.8	0.0	47.0	0.0	0.0	0.0	37.5	0.0	7.8	0.0		

Clock cycle : 10

PC: 6

Instruction 'SUBD F8 F4 F6' FINISHED at clock 10 in 'Add2'

Instruction 'ADDD F10 F0 F0' BROADCASTED in CDB at clock 10 with value '15.6'

					TIMING	3 TABLE					
PC	~~~~~	-~~~~~~ INSTRI	~~~~~~~~~ UCTION	I	SSUED	STAR	TED	~~~~~~ FIN	ISHED	write	 CDB
0		LD F2 45(R1)			1	2			4	5	
1			34(R2)		2	3			5	6	
2		ADDD F0 F8 F10			3	4			5	7	
3			F10 F10		4	5			6	8	
4			8 F4 F6		5	9			10	-	
5		ADDD F:	10 F0 F0		7	8			9	16)
~~~~~~	~~~~~	~~~~~~	~~~~~~~	~~~~~	Reservatio	on Station	.~~~~	~~~~~~	~~~~~~	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
Time lef	~~~~~ t	Tag	~~~~~~~~ OP	~~~~~	Busy	valueJ		valueK	Qj		Qk
		Add0			False	0		0			
0		Add1	CURE		False	0		0			
0		Add2 Mult0	SUBD		True False	0.0 0		37 <b>.</b> 5 0			
		Mult1			False	0		0			
	~~~~~	~~~~~~~	~~~~~~~~	~~~~~	~~~~~						
~~~~~	~~~~~		d Station	~~~~~	~~~~~~						
Time lef	t	Tag	Busy		Address						
		Load0	False								
		Load1	False								
		Load2	False								
		Load3	False								
		Load4	False								
		Load5	False								
·~~~~~	~~~~~	~~~~~~	~~~~~~~	~~~~~	~~~~~~~ Reg:	ister	·~~~~	~~~~~~	~~~~~~		
Name Qi	~~~~~ F0	~~~~~~~ F1	F2	F3		F5	F6	~~~~~~ F7	F8 Add2	F9	·~~~~~~
Value	7.8	0.0	47.0	0.0	0.0	0.0	37.5	0.0	7.8	0.0	

Clock cycle : 11

PC : 6

Time left

Instruction 'SUBD F8 F4 F6' BROADCASTED in CDB at clock 11 with value '-37.5'

OP

Tag

Add0

TIMING TABLE											
PC	INSTRUCTION	ISSUED	STARTED	FINISHED	Write CDB						
0	LD F2 45(R1)	1	2	4	5						
1	LD F6 34(R2)	2	3	5	6						
2	ADDD F0 F8 F10	3	4	5	7						
3	ADDD F4 F10 F10	4	5	6	8						
4	SUBD F8 F4 F6	5	9	10	11						
5	ADDD F10 F0 F0	7	8	9	10						
.~~~~~~~~	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		on Station	~~~~~~~~~	~~~~~~~~~~~~~~~						

valueJ

0

valueK

Qj

Qk

Busy

False

Add1	False	0	0
Add2	False	0	0
Mult0	False	0	0
Mult1	False	0	0
	~~~~~~~		

~~~~~~~~~	~~~~~~~~~	~~~~~~~									
Load Station											
~~~~~~~~~	~~~~~~~~~	~~~~~~~									
Tag	Busy	Address									
Load0	False										
Load1	False										
Load2	False										
Load3	False										
Load4	False										
Load5	False										
	Tag Load0 Load1 Load2 Load3 Load4	Load Station Tag Busy Load0 False Load1 False Load2 False Load3 False Load4 False	Tag Busy Address Load0 False Load1 False Load2 False Load3 False Load4 False								

~~~~~~~	$a_{n}$											
Register												
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~												
Name	FØ	F1	F2	F3	F4	F5	F6	F7	F8	F9		
Qi Value	7.8	0.0	47.0	0.0	0.0	0.0	37.5	0.0	-37.5	0.0		