

## DAFTAR PUSTAKA

Bector, C. R. and Chandra, S., 2005, *Fuzzy Mathematical Programing and Fuzzy Matrix Games*, Springer-Verlag New York, Inc., USA.

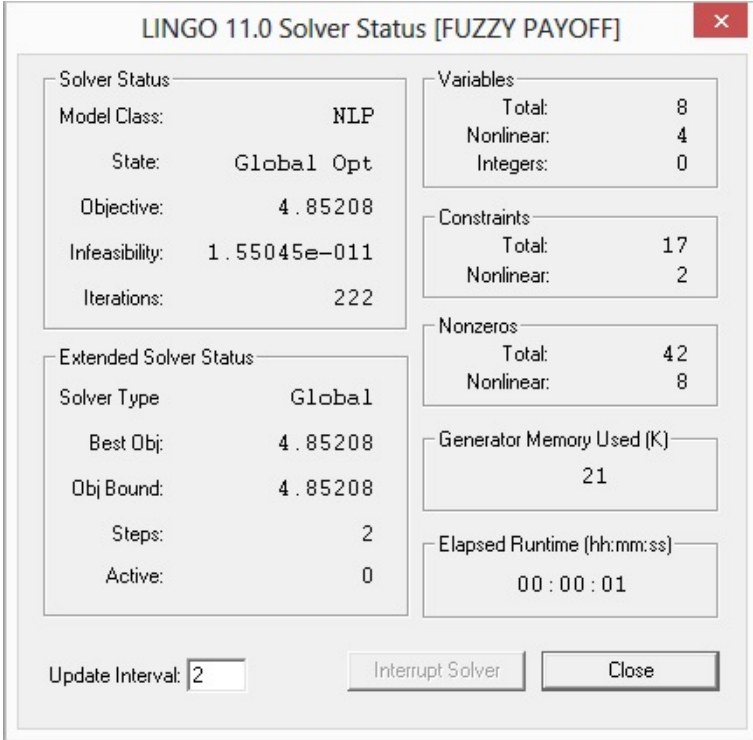
Thomas, L. C., 2003, *Games, Theory and Applications*, Dover Publication, Inc., USA.

Wang, L. X., 1998, *A Course in Fuzzy Set System and Control*, Springer-Verlag New York, Inc., USA.

Winston, L. W., 2003, *Operations Research Applications and Algorithms*, Fourth Edition, Duxbury Press:Belmon CA

## LAMPIRAN A

### Hasil Program Lingo Untuk Contoh 3.1.3



**LINGO 11.0 Solver Status [FUZZY PAYOFF]**

Solver Status		Variables	
Model Class:	NLP	Total:	8
State:	Global Opt	Nonlinear:	4
Objective:	4.85208	Integers:	0
Infeasibility:	1.55045e-011	Constraints	
Iterations:	222	Total:	17
		Nonlinear:	2
Extended Solver Status		Nonzeros	
Solver Type	Global	Total:	42
Best Obj:	4.85208	Nonlinear:	8
Obj Bound:	4.85208	Generator Memory Used (K)	
Steps:	2	21	
Active:	0	Elapsed Runtime (hh:mm:ss)	
		00 : 00 : 01	

Update Interval:

Solution Report - FUZZY PAYOFF			
Global optimal solution found.			
Objective value:		4.852075	
Objective bound:		4.852075	
Infeasibilities:		0.1550449E-10	
Extended solver steps:		2	
Total solver iterations:		222	
	Variable	Value	Reduced Cost
	V	3.342201	0.000000
	W	1.509874	0.000000
	Y1	0.1855187	0.000000
	Y2	0.8144813	0.000000
	LAMBDA	0.000000	0.000000
	X1	0.3312068	0.000000
	X2	0.6687932	0.000000
	ETA	0.000000	0.000000
	Row	Slack or Surplus	Dual Price
	1	4.852075	1.000000
	2	0.6141178	0.000000
	3	0.000000	2.558206
	4	0.000000	0.9464010
	5	0.3398482	0.000000
	6	0.000000	-3.558206
	7	0.000000	-1.946401
	8	0.000000	12.63709
	9	0.000000	5.413796
	10	0.3312068	0.000000
	11	0.6687932	0.000000
	12	0.1855187	0.000000
	13	0.8144813	0.000000
	14	0.000000	-0.6270391
	15	0.000000	-0.3853638
	16	1.000000	0.000000
	17	1.000000	0.000000

## LAMPIRAN B

### Hasil Program Lingo Untuk Contoh 3.2.2



The screenshot displays the LINGO 11.0 Solver Status window for a model named "FUZZY GOAL AND FUZZY PAY...". The window is divided into several sections providing detailed solver information.

Solver Status	
Model Class:	NLP
State:	Global Opt
Objective:	0.921325
Infeasibility:	1.68754e-013
Iterations:	186

Variables	
Total:	5
Nonlinear:	4
Integers:	0

Constraints	
Total:	15
Nonlinear:	2

Nonzeros	
Total:	33
Nonlinear:	8

Extended Solver Status	
Solver Type	Global
Best Obj:	0.921325
Obj Bound:	0.921325
Steps:	3
Active:	0

Generator Memory Used (K)	
21	

Elapsed Runtime (hh:mm:ss)	
00:00:01	

Update Interval:

Solution Report - FUZZY GOAL AND FUZZY PAYOFF

Global optimal solution found.

Objective value:	0.9213250
Objective bound:	0.9213251
Infeasibilities:	0.1687539E-12
Extended solver steps:	3
Total solver iterations:	186

Variable	Value	Reduced Cost
LAMBDA	0.9213250	0.000000
Y1	0.5029932	0.000000
Y2	0.4970068	0.000000
X1	0.4853134	0.000000
X2	0.5146866	0.000000

Row	Slack or Surplus	Dual Price
1	0.9213250	1.000000
2	0.5341433E-02	0.000000
3	0.2299791E-01	0.000000
4	0.000000	0.6720423E-01
5	0.2956998E-01	0.000000
6	0.000000	-0.1698602
7	0.000000	-11.72378
8	0.000000	17.83085
9	0.000000	17.93220
10	0.4853134	0.000000
11	0.5146866	0.000000
12	0.5029932	0.000000
13	0.4970068	0.000000
14	0.9213250	0.000000
15	0.7867495E-01	0.000000