Appendix C: Output screens in the Tower of Hanoi problem

T
> (load "a:sri-han.lsp")
 ; loading "a:sri-han.lsp"
SRISHTI
loaded part-1
loaded part-2
loaded part-3
loaded part-4
T
> (sri-han)
L1=(1 2 3 4 0)
L2=(0)
L3=(0)
(PLEASE MAKE YOUR MOVE MENTIONING "disk from" FIRST AND THEN "disk to"
> (1 12)
(L1 L2)(THIS WAS YOUR MOVE)
inp="move available from tutor"
chk=WHEN-GENERALISATION-IS-THE-ONLY-OPERATOR
ls=ROTE-LEARNING

"inside search do"
LEARNING-BY-BEING-TOLD-AND-ASKING-QUESTIONS

"inside search do"
LEARNING-BY-DEDUCTION

"inside search do"
LEARNING-BY-INDUCTION

"inside search do"
LEARNING-BY-INDUCTION-FROM-EXAMPLES

"inside search do"
LEARNING-BY-INDUCTION-FROM-OBSERVATION-AND-DISCOVERY

"inside search do"
LEARNING-BY-INDUCTION-FROM-EXPERIMENTATION

"inside search do"
LEARNING-BY-INDUCTION-FROM-EXPLANATION-BASED-LEARNING

"inside search do"
LEARNING-BY-INDUCTION-FROM-SIMILARITY-BASED-LEARNING

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"inside search do"
LEARNING-BY-INDUCTION-FROM-TRAINING-INSTANCES

ls=ROTE-LEARNING
"inside search do-2"
LEARNING-BY-BEING-TOLD-AND-ASKING-QUESTIONS"inside search do-2"
LEARNING-BY-DEDUCTION"inside search do-2"
LEARNING-BY-INDUCTION"inside search do-2"
LEARNING-BY-INDUCTION-FROM-EXAMPLES"inside search do-2"
LEARNING-BY-INDUCTION-FROM-OBSERVATION-AND-DISCOVERY"inside search do-
LEARNING-BY-INDUCTION-FROM-EXPERIMENTATION"inside search do-2"
LEARNING-BY-INDUCTION-FROM-EXPLANATION-BASED-LEARNING"inside search do
LEARNING-BY-INDUCTION-FROM-SIMILARITY-BASED-LEARNING"inside search do-
LEARNING-BY-INDUCTION-FROM-TRAINING-INSTANCES"inside search do-2"
LEARNING-BY-ANALOGY"inside search do-2"
FAILURE-DRIVEN-LEARNING"inside search do-2"
LEARNING-BY-CHUNKING"inside search do-2"
LEARNING-WITH-GENETIC-ALGORITHMS"inside search do-2"
LEARNING-BY-ABDUCTION
learning strategy invoked is - strategy-1 LEARNING-BY-INDUCTION-FROM-T
in induct-1
status= ((1 2 3 4 0) (0) (0) (2 3 4 0) (1 0) (0))
KW=(B M S 1 L1 L2)
L1=(2 3 4 0)
L2=(1 0)
L3=(0)
"exp check"
"file checking"
Fcheck success(L1 L3 1)
"checking info"
I am making the next move (L1 L3)
with assurance 1
"kindly answer with an A, if I may, else with an N"
> a
inp="move available from past experience"
chk=ACQUIRING-GENERALISED-PLANS
ls=ROTE-LEARNING

"inside search do"
LEARNING-BY-BEING-TOLD-AND-ASKING-QUESTIONS

"inside search do"
LEARNING-BY-DEDUCTION

"inside search do"
LEARNING-BY-INDUCTION
"inside search do"
LEARNING-BY-INDUCTION-FROM-EXAMPLES
"inside search do"
LEARNING-BY-INDUCTION-FROM-OBSERVATION-AND-DISCOVERY
"inside search do"
LEARNING-BY-INDUCTION-FROM-EXPERIMENTATION
"inside search do"
LEARNING-BY-INDUCTION-FROM-EXPLANATION-BASED-LEARNING
"inside search do"
LEARNING-BY-INDUCTION-FROM-SIMILARITY-BASED-LEARNING
ls=ROTE-LEARNING
"inside search do-2"
LEARNING-BY-BEING-TOLD-AND-ASKING-QUESTIONS"inside search do-2"
LEARNING-BY-DEDUCTION"inside search do-2"
LEARNING-BY-INDUCTION"inside search do-2"
LEARNING-BY-INDUCTION-FROM-EXAMPLES"inside search do-2"
LEARNING-BY-INDUCTION-FROM-OBSERVATION-AND-DISCOVERY"inside search do-2"
LEARNING-BY-INDUCTION-FROM-EXPERIMENTATION"inside search do-2"
LEARNING-BY-INDUCTION-FROM-EXPLANATION-BASED-LEARNING"inside search do
LEARNING-BY-INDUCTION-FROM-SIMILARITY-BASED-LEARNING"inside search do-
LEARNING-BY-INDUCTION-FROM-TRAINING-INSTANCES"inside search do-2"
LEARNING-BY-ANALOGY"inside search do-2"
FAILURE-DRIVEN-LEARNING"inside search do-2"
LEARNING-BY-CHUNKING"inside search do-2"
LEARNING-WITH-GENETIC-ALGORITHMS"inside search do-2"
LEARNING-BY-ABDUCTION
learning strategy invoked is - strategy-1 LEARNING-BY-INDUCTION-FROM-S
in induct-3
status= ((1 2 3 0) (0) (0) (2 3 4 0) (1 0) (0) (3 4 0) (1 0) (2 0))
KW2=(B M S 1 L1 L2 B M S 2 L1 L3)
L1=(3 4 0)
L2=(1 0)
L3=(2 0)
"exp check"
"file checking"
Fcheck sucess(L2 L3 1)
"checking info"
I am making the next move (L2 L3)
with assurance 1
"kindly answer with an A, if I may, else with an N"
> a
inp="move available from past experience"
chk=ACQUIRING-GENERALISED-PLANS
ls=ROTE-LEARNING

"inside search do"
LEARNING-BY-BEING-TOLD-AND-ASKING-QUESTIONS

"inside search do"
LEARNING-BY-DEDUCTION

"inside search do"
LEARNING-BY-INDUCTION

"inside search do"
LEARNING-BY-INDUCTION-FROM-EXAMPLES

"inside search do"
LEARNING-BY-INDUCTION-FROM-OBSERVATION-AND-DISCOVERY

"inside search do"
LEARNING-BY-INDUCTION-FROM-EXPERIMENTATION

"inside search do"
LEARNING-BY-INDUCTION-FROM-EXPLANATION-BASED-LEARNING

"inside search do"
LEARNING-BY-INDUCTION-FROM-SIMILARITY-BASED-LEARNING

ls=ROTE-LEARNING

"inside search do-2"
LEARNING-BY-BEING-TOLD-AND-ASKING-QUESTIONS"inside search do-2"
LEARNING-BY-DEDUCTION"inside search do-2"
LEARNING-BY-INDUCTION"inside search do-2"
LEARNING-BY-INDUCTION-FROM-EXAMPLES"inside search do-2"
LEARNING-BY-INDUCTION-FROM-OBSERVATION-AND-DISCOVERY"inside search do-
LEARNING-BY-INDUCTION-FROM-EXPERIMENTATION"inside search do-2"
LEARNING-BY-INDUCTION-FROM-EXPLANATION-BASED-LEARNING"inside search do
LEARNING-BY-INDUCTION-FROM-SIMILARITY-BASED-LEARNING"inside search do-
LEARNING-BY-INDUCTION-FROM-TRAINING-INSTANCES"inside search do-2"
LEARNING-BY-ANALOGY"inside search do-2"
FAILURE-DRIVEN-LEARNING"inside search do-2"
LEARNING-BY-CHUNKING"inside search do-2"
21
LEARNING-WITH-GENETIC-ALGORITHMS

LEARNING-BY-ABDUCTION

learning strategy invoked is - strategy-1

LEARNING-BY-INDUCTION-FROM-S

in induct-3

status= ((1 2 3 4 0) (0) (0) (2 3 4 0) (1 0) (0) (3 4 0) (1 0) (2 0)

KW2=(B M S 1 L1 L2 B M S 2 L1 L3 B S M 3 L2 L3)

L1=(3 4 0)

L2=(0)

L3=(1 2 0)

"exp check"

"file checking"

Fcheck sucess(L2 L3 1)

"checking info"

I am making the next move (L2 L3)

"kindly answer with an A, if I may, else with an N"

> n

I am making the next move (L2 L3)

"kindly answer with an A, if i may, else with a N"

> n

L1=(3 4 0)

L2=(0)

L3=(1 2 0)

(PLEASE MAKE YOUR MOVE MENTIONING "disk from" FIRST AND THEN "disk to"

> (11 12)

(L1 L2)(THIS WAS YOUR MOVE)

inp="move available from tutor"

chk=WHEN-GENERALISATION-IS-THE-ONLY-OPERATOR

ls=ROTE-LEARNING

"inside search do"

LEARNING-BY-BEING-TOLD-AND-ASKING-QUESTIONS

"inside search do"

LEARNING-BY-DEDUCTION

"inside search do"

LEARNING-BY-INDUCTION

"inside search do"

LEARNING-BY-INDUCTION-FROM-EXAMPLES

"inside search do"

LEARNING-BY-INDUCTION-FROM-OBSERVATION-AND-DISCOVERY

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"inside search do"
LEARNING-BY-INDUCTION-FROM-EXPERIMENTATION

"inside search do"
LEARNING-BY-INDUCTION-FROM-EXPLANATION-BASED-LEARNING

"inside search do"
LEARNING-BY-INDUCTION-FROM-SIMILARITY-BASED-LEARNING

"inside search do"
LEARNING-BY-INDUCTION-FROM-TRAINING-INSTANCES

ls=ROTE-LEARNING
"inside search do-2"
LEARNING-BY-BEING-TOLD-AND-ASKING-QUESTIONS"inside search do-2"
LEARNING-BY-DEDUCTION"inside search do-2"
LEARNING-BY-INDUCTION"inside search do-2"
LEARNING-BY-INDUCTION-FROM-EXAMPLES"inside search do-2"
LEARNING-BY-INDUCTION-FROM-OBSERVATION-AND-DISCOVERY"inside search do-2"
LEARNING-BY-INDUCTION-FROM-EXPERIMENTATION"inside search do-2"
LEARNING-BY-INDUCTION-FROM-EXPLANATION-BASED-LEARNING"inside search do-2"
LEARNING-BY-INDUCTION-FROM-SIMILARITY-BASED-LEARNING"inside search do-2"
LEARNING-BY-INDUCTION-FROM-TRAINING-INSTANCES"inside search do-2"
LEARNING-BY-ANALOGY"inside search do-2"
FAILURE-DRIVEN-LEARNING"inside search do-2"
LEARNING-BY-CHUNKING"inside search do-2"
LEARNING-WITH-GENETIC-ALGORITHMS"inside search do-2"
LEARNING-BY-ABDUCTION
learning strategy invoked is - strategy-1 LEARNING-BY-INDUCTION-FROM-TRAINING-INSTANCES

exp move((3 4 0) (0) (1 2 0) (L1 L2))
status= ((1 2 3 4 0) (0) (2 3 4 0) (1 0) (0) (3 4 0) (1 0) (2 0)
KW1=(B M S 1 L1 L2 B M S 2 L1 L3 B S M 3 L2 L3 B S M 3 L1 L2)
L1=(4 0)
L2=(3 0)
L3=(1 2 0)

AFTER A FEW MOVES

L1=(0)
L2=(1 2 3 0)
L3=(4 0)
exp check
"file checking"
Fcheck success(L2 L3 1)
"checking info"
I am making the next move (L2 L3)
with assurance 1
"kindly answer with an A, if I may, else with an N"
> a
inp="move available from past experience"
chk=ACQUIRING-GENERALISED- PLANS
ls=ROTE-LEARNING

"inside search do"
LEARNING-BY-BEING-TOLD-AND-ASKING-QUESTIONS

"inside search do"
LEARNING-BY-DEDUCTION

"inside search do"
LEARNING-BY-INDUCTION

"inside search do"
LEARNING-BY-INDUCTION-FROM-EXAMPLES

"inside search do"
LEARNING-BY-INDUCTION-FROM-OBSERVATION-AND-DISCOVERY

"inside search do"
LEARNING-BY-INDUCTION-FROM-EXPERIMENTATION

"inside search do"
LEARNING-BY-INDUCTION-FROM-EXPLANATION-BASED-LEARNING

"inside search do"
LEARNING-BY-INDUCTION-FROM-SIMILARITY-BASED-LEARNING

ls=ROTE-LEARNING
"inside search do-2"
LEARNING-BY-BEING-TOLD-AND-ASKING-QUESTIONS"inside search do-2"
LEARNING-BY-DEDUCTION"inside search do-2"
LEARNING-BY-INDUCTION"inside search do-2"
LEARNING-BY-INDUCTION-FROM-EXAMPLES"inside search do-2"
LEARNING-BY-INDUCTION-FROM-OBSERVATION-AND-DISCOVERY"inside search do-
LEARNING-BY-INDUCTION-FROM-EXPERIMENTATION"inside search do-2"
LEARNING-BY-INDUCTION-FROM-EXPLANATION-BASED-LEARNING"inside search do
LEARNING-BY-INDUCTION-FROM-SIMILARITY-BASED-LEARNING"inside search do-
LEARNING-BY-INDUCTION-FROM-TRAINING-INSTANCES"inside search do-2"
LEARNING-BY-ANALOGY"inside search do-2"
FAILURE-DRIVEN-LEARNING"inside search do-2"
LEARNING-BY-CHUNKING"inside search do-2"
LEARNING-WITH-GENETIC-ALGORITHMS"inside search do-2"
LEARNING-BY-ABDUCTION
learning strategy invoked is - strategy-1 LEARNING-BY-INDUCTION-FROM-S
in induct-3
status= ((1 2 3 4 0) (0) (0) (2 3 4 0) (1 0) (0) (3 4 0) (1 0) (2 0)
KW2=(B M S 1 L1 L2 B M S 2 L1 L3 B S M 3 L2 L3 B S M 3 L1 L2 B M S 4 L
L1=(0)
L2=(2 3 0)
L3=(1 4 0)
"exp check"
"file checking"
Fcheck success(L2 L1 1)
"checking info"
I am making the next move (L2 L1)
with assurance 1
"kindly answer with an A, if I may, else with an N"
> a
inp="move available from past experience"
chk=ACQUIRING-GENERALISED-PLANS
ls=ROTE-LEARNING

"inside search do"
LEARNING-BY-BEING-TOLD-AND-ASKING-QUESTIONS

"inside search do"
LEARNING-BY-DEDUCTION

"inside search do"
LEARNING-BY-INDUCTION

"inside search do"
LEARNING-BY-INDUCTION-FROM-EXAMPLES

"inside search do"
LEARNING-BY-INDUCTION-FROM-OBSERVATION-AND-DISCOVERY

"inside search do"
LEARNING-BY-INDUCTION-FROM-EXPERIMENTATION

"inside search do"
LEARNING-BY-INDUCTION-FROM-EXPLANATION-BASED-LEARNING

"inside search do"

LEARNING-BY-INDUCTION-FROM-SIMILARITY-BASED-LEARNING

ls=ROTE-LEARNING

"inside search do-2"

LEARNING-BY-BEING-TOLD-AND-ASKING-QUESTIONS

LEARNING-BY-DEDUCTION

"inside search do-2"

LEARNING-BY-INDUCTION

"inside search do-2"

LEARNING-BY-INDUCTION-FROM-EXAMPLES

"inside search do-2"

LEARNING-BY-INDUCTION-FROM-OBSERVATION-AND-DISCOVERY

"inside search do-

LEARNING-BY-INDUCTION-FROM-EXPERIMENTATION

"inside search do-2"

LEARNING-BY-INDUCTION-FROM-EXPLANATION-BASED-LEARNING

"inside search do

LEARNING-BY-INDUCTION-FROM-SIMILARITY-BASED-LEARNING

"inside search do-

LEARNING-BY-INDUCTION-FROM-TRAINING-INSTANCES

"inside search do-2"

LEARNING-BY-ANALOGY

"inside search do-2"

FAILURE-DRIVEN-LEARNING

"inside search do-2"

LEARNING-BY-CHUNKING

"inside search do-2"

LEARNING-WITH-GENETIC-ALGORITHMS

"inside search do-2"

LEARNING-BY-ABDUCTION

learning strategy invoked is - strategy-1

LEARNING-BY-INDUCTION-FROM-S

in induct-3

status= ((1 2 3 4 0) (0) (0) (2 3 4 0) (1 0) (0) (3 4 0) (1 0) (2 0)

KW2=(B M S 1 L1 L2 B M S 2 L1 L3 B S M 3 L2 L3 B S M 3 L1 L2 B M S 4 L

L1=(2 0)

L2=(3 0)

L3=(1 4 0)

AFTER A FEW MOVES

L1=(1 2 0)

L2=(0)

L3=(3 4 0)

"exp check"

"file checking"

Fcheck success(L1 L3 1)

"checking info"

I am making the next move (L1 L3)

with assurance 1

"kindly answer with an A, if I may, else with an N"

> n

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L1=(1 2 0)
L2=(0)
L3=(3 4 0)

(PLEASE MAKE YOUR MOVE MENTIONING "disk from" FIRST AND THEN "disk to"
> (11 12)
L1 L2) (THIS WAS YOUR MOVE)
inp="move available from tutor"
chk=WHEN-GENERALISATION-IS-THE-ONLY-OPERATOR
ls=ROTE-LEARNING

"inside search do"
LEARNING-BY-BEING-TOLD-AND-ASKING-QUESTIONS

"inside search do"
LEARNING-BY-DEDUCTION

"inside search do"
LEARNING-BY-INDUCTION

"inside search do"
LEARNING-BY-INDUCTION-FROM-EXAMPLES

"inside search do"
LEARNING-BY-INDUCTION-FROM-OBSERVATION-AND-DISCOVERY

"inside search do"
LEARNING-BY-INDUCTION-FROM-EXPERIMENTATION

"inside search do"
LEARNING-BY-INDUCTION-FROM-EXPLANATION-BASED-LEARNING

"inside search do"
LEARNING-BY-INDUCTION-FROM-SIMILARITY-BASED-LEARNING

"inside search do"
LEARNING-BY-INDUCTION-FROM-TRAINING- INSTANCES

ls=ROTE-LEARNING
"inside search do-2"
LEARNING-BY-BEING-TOLD-AND-ASKING-QUESTIONS"inside search do-2"
LEARNING-BY-DEDUCTION"inside search do-2"
LEARNING-BY-INDUCTION"inside search do-2"
LEARNING-BY-INDUCTION-FROM-EXAMPLES"inside search do-2"
LEARNING-BY-INDUCTION-FROM-OBSERVATION-AND-DISCOVERY"inside search do-
LEARNING-BY-INDUCTION-FROM-EXPERIMENTATION"inside search do-2"
LEARNING-BY-INDUCTION-FROM-EXPLANATION-BASED-LEARNING
LEARNING-BY-INDUCTION-FROM-SIMILARITY-BASED-LEARNING
LEARNING-BY-INDUCTION-FROM-TRAINING-INSTANCES
LEARNING-BY-ANALOGY
FAILURE-DRIVEN-LEARNING
LEARNING-BY-CHUNKING
LEARNING-WITH-GENETIC-ALGORITHMS
LEARNING-BY-ABDUCTION

learning strategy invoked is - strategy-1

LEARNING-BY-INDUCTION-FROM-TRAINING-INSTANCES

exp move((1 2 0) (0) (3 4 0) (L1 L2))
status= ((1 2 3 4 0) (0) (0) (3 4 0) (1 0) (0) (1 0) (2 0)
KW1=(B M S 1 L1 L2 B M S 2 L1 L3 B S M 3 L2 L3 B S M 3 L1 L2 B M S 4 L;
L1=(2 0)
L2=(1 0)
L3=(3 4 0)
"exp check"
Fcheck success(L1 L3 1)
"checking info"
I am making the next move (L1 L3)
with assurance 1
"kindly answer with an A, if I may, else with an N"
>a
inp="move available from past experience"
chk=ACQUIRING-GENERALISED-PLANS
ls=ROTE-LEARNING

"inside search do"
LEARNING-BY-BEING-TOLD-AND-ASKING-QUESTIONS

"inside search do"
LEARNING-BY-DEDUCTION

"inside search do"
LEARNING-BY-INDUCTION

"inside search do"
LEARNING-BY-INDUCTION-FROM-EXAMPLES

"inside search do"
LEARNING-BY-INDUCTION-FROM-OBSERVATION-AND-DISCOVERY

"inside search do"
LEARNING-BY-INDUCTION-FROM-EXPERIMENTATION

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LEARNING-BY-INDUCTION-FROM-EXPLANATION-BASED-LEARNING

LEARNING-BY-INDUCTION-FROM-SIMILARITY-BASED-LEARNING

ls=ROTE-LEARNING
"inside search do-2"

LEARNING-BY-BEING-TOLD-AND-ASKING-QUESTIONS

LEARNING-BY-DEDUCTION

LEARNING-BY-INDUCTION

LEARNING-BY-INDUCTION-FROM-EXAMPLES

LEARNING-BY-INDUCTION-FROM-OBSERVATION-AND-DISCOVERY

LEARNING-BY-INDUCTION-FROM-EXPERIMENTATION

LEARNING-BY-INDUCTION-FROM-EXPLANATION-BASED-LEARNING

LEARNING-BY-INDUCTION-FROM-SIMILARITY-BASED-LEARNING

LEARNING-BY-INDUCTION-FROM-TRAINING-INSTANCES

LEARNING-BY-ANALOGY

FAILURE-DRIVEN-LEARNING

LEARNING-BY-CHUNKING

LEARNING-WITH-GENETIC-ALGORITHMS

LEARNING-BY-ABDUCTION

learning strategy invoked is - strategy-1

LEARNING-BY-INDUCTION-FROM-S

in induct-3

status= ((1 2 3 4 0) (0) (0) (2 3 4 0) (1 0) (0) (3 4 0) (1 0) (2 0)

KW2=(B M S 1 L1 L2 B M S 2 L1 L3 B S M 3 L2 L3 B S M 3 L1 L2 B M S 4 L

L1=(0)

L2=(1 0)

L3=(2 3 4 0)

"exp check"

Fcheck success(L2 L3 1)

"checking info"

I am making the next move (L2 L3)

with assurance 1

"kindly answer with an A, if I may, else with an N" > a

inp="move available from past experience"

chk=ACQUIRING-GENERALISED-PLANS

ls=ROTE-LEARNING

"inside search do"

LEARNING-BY-BEING-TOLD-AND-ASKING-QUESTIONS
LEARNING-BY-DEDUCTION
LEARNING-BY-INDUCTION
LEARNING-BY-INDUCTION-FROM-EXAMPLES
LEARNING-BY-INDUCTION-FROM-OBSERVATION-AND-DISCOVERY
LEARNING-BY-INDUCTION-FROM-EXPERIMENTATION
LEARNING-BY-INDUCTION-FROM-EXPLANATION-BASED-LEARNING
LEARNING-BY-INDUCTION-FROM-SIMILARITY-BASED-LEARNING

ls=ROTE-LEARNING
LEFT-BY-INDUCTION-FROM-TRAINING-INSTANCES
LEARNING-BY-ANALOGY
FAILURE-DRIVEN-LEARNING
LEARNING-BY-ABDUCTION

learning strategy invoked is - strategy-1 LEARNING-BY-INDUCTION-FROM-S
in induct-3
status= ((1 2 3 4 0) (0) (0) (2 3 4 0) (1 0) (0) (3 4 0) (1 0) (2 0)
KW2=(B M S 1 L1 L2 B M S 2 L1 L3 B S M 3 L2 L3 B S M 3 L1 L2 B M S 4 L
"mission accomplished"
seq= ((1 2 3 4 0) (0) (0) (2 3 4 0) (1 0) (0) (3 4 0) (1 0) (2 0) (3 4
met= METHOD-ALG-HEURISTIC-1
metavail= (METHOD-ALG-HEURISTIC-1 RULE-38 FEATURES-1 MANY-COINCIDENTAL
metahw= (RULE-38)
metwhat= (RULE-38 WHAT-IS-IT-1 A-DOMAIN-IS-INTERESTING-IF-A-SPECIALIS
interesting item being checked for (RULE-38 WHAT-IS-IT-1 A-DOMAIN-IS-I
met= METHOD-ALG-HEURISTIC-2
metavail= (METHOD-ALG-HEURISTIC-2 RULE-31 METHOD-ALG-HEURISTIC-1 RULE-
metahw= (RULE-31)
metwhat= (RULE-31 WHAT-IS-IT-1 IF-SOME-NORMALLY-INEFFICIENT-OPOERATI
interesting item being checked for (RULE-31 WHAT-IS-IT-1 IF-SOME-NORMA
met= METHOD-ALG-HEURISTIC-3
metavail= (METHOD-ALG-HEURISTIC-3 RULE-32 METHOD-ALG-HEURISTIC-2 RULE-
metahw= (RULE-32)
metwhat= (RULE-32 WHAT-IS-IT-1 IF-X-DOES-NOT-MEET-PREDICTIONS-THEN-X-
interesting item being checked for (RULE-32 WHAT-IS-IT-1 IF-X-DOES-NOT
met= METHOD-ALG-HEURISTIC-4
metavail= (METHOD-ALG-HEURISTIC-4 RULE-33 METHOD-ALG-HEURISTIC-3 RULE-
metahw= (RULE-33)
metwhat= (RULE-33 WHAT-IS-IT-1 IF-EXACTLY-ONE-ELEMENT-OF-A-CLASS-SATI
interesting item being checked for (RULE-33 WHAT-IS-IT-1 IF-EXACTLY-ON
met= METHOD-ALG-HEURISTIC-5
metavail= (METHOD-ALG-HEURISTIC-5 RULE-34 METHOD-ALG-HEURISTIC-4 RULE-
metahw= (RULE-34)
metwhat= (RULE-34 WHAT-IS-IT-1 IF-A-IS-SIMILAR-TO-B-IN-A-KEY-WAY-AND-
interesting item being checked for (RULE-34 WHAT-IS-IT-1 IF-A-IS-SIMIL
met= METHOD-ALG-HEURISTIC-6
metavail= (METHOD-ALG-HEURISTIC-6 RULE-35 METHOD-ALG-HEURISTIC-5 RULE-
metahw= (RULE-35)
metwhat= (RULE-35 WHAT-IS-IT-1 FOCUS-OF-ATTENTION-HEURISTIC)
interesting item being checked for (RULE-35 WHAT-IS-IT-1 FOCUS-OF-ATTE
met= METHOD-ALG-HEURISTIC-7
metavail= (METHOD-ALG-HEURISTIC-7 RULE-36 METHOD-ALG-HEURISTIC-6 RULE-
metahw= (RULE-36)
interesting item being checked for (RULE-36 WHAT-IS-IT IF-THE-RESULTS-
met= METHOD-ALG-HEURISTIC-8
metavail= (METHOD-ALG-HEURISTIC-8 RULE-37 METHOD-ALG-HEURISTIC-7 RULE-
metahw= (RULE-37)
metwhat= (RULE-37 WHAT-IS-IT-1 NOTICE-INVARIANTS)
interesting item being checked for (RULE-37 WHAT-IS-IT-1 NOTICE INVAR

current = (1 2 3 4 0)
place= ONE
current = (2 3 4 0)
place= ONE
current = (3 4 0)
place= ONE

disc= 4
current = (3 4 0)
place= ONE
current = (4 0)
place= ONE
current = (1 4 0)
place= ONE
current = (1 4 0)
place= ONE
current = (4 0)
place= ONE
current = (0)
place= THREE

change in best-count; value of r is= 24
(1 4 0)
(2 3 0)
(0)
(4 0)
(1 2 3 0)
(0)
(0)
(1 2 3 0)
(4 0)
disc= 4
stages= ((1 4 0) (2 3 0) (0))((4 0) (1 2 3 0) (0))((0) (1 2 3 0) (4 0)
>a
current = (0)
place= THREE
current = (2 0)
place= THREE
current = (1 2 0)
place= THREE
current = (1 2 0)
place= THREE
current = (2 0)
place= THREE
current = (0)
place= THREE
current = (0)
place= THREE
"in change overall-best"
disc= 3
current = (1 2 3 4 0)
place= ONE
current = (2 3 4 0)
place= ONE

238
current = (3 4 0)
place= ONE

current = (3 4 0)
place= ONE

current = (4 0)
place= TWO

change in best-count; value of r is= 12

(3 4 0)
(1 0)
(2 0)
(3 4 0)
(0)
(1 2 0)
(4 0)
(3 0)
(1 2 0)

disc= 3

stages= ((3 4 0) (1 0) (2 0))((3 4 0) (0) (1 2 0))((4 0) (3 0) (1 2 0) > a

current = (1 4 0)
place= TWO

current = (1 4 0)
place= TWO

current = (4 0)
place= TWO

current = (0)
place= TWO

current = (0)
place= TWO

current = (2 0)
place= TWO

current = (1 2 0)
place= TWO

current = (1 2 0)
place= THREE

change in best-count; value of r is= 36

(2 0)
(3 0)
(1 4 0)
(1 2 0)
(3 0)
(4 0)
(1 2 0)
(0)
(3 4 0)
disc = 3
stages = ((2 0) (3 0) (1 4 0))((1 2 0) (3 0) (4 0))((1 2 0) (0) (3 4 0)
> a
current = (2 0)
place = THREE
current = (0)
place = THREE
current = (0)
place = THREE
disc = 2
current = (1 2 3 4 0)
place = ONE
current = (2 3 4 0)
place = ONE
current = (3 4 0)
place = THREE
change in best-count; value of r is = 6
(1 2 3 4 0)
(0)
(0)
(2 3 4 0)
(1 0)
(0)
(3 4 0)
(1 0)
(2 0)
disc = 2
stages = ((1 2 3 4 0) (0) (0))((2 3 4 0) (1 0) (0))((3 4 0) (1 0) (2 0)
> a
current = (3 4 0)
place = THREE
current = (4 0)
place = THREE
current = (1 4 0)
place = THREE
current = (1 4 0)
place = TWO
change in best-count; value of r is = 18
(4 0)
(3 0)
(1 2 0)
(1 4 0)
(3 0)
(2 0)
(1 4 0)
disc = 2
stages = ((4 0) (3 0) (1 2 0)) ((1 4 0) (3 0) (2 0)) ((1 4 0) (2 3 0) (0
> a
current = (4 0)
place = TWO
current = (0)
place = TWO
current = (0)
place = TWO
current = (2 0)
place = ONE
current = (1 2 0)
place = ONE
current = (1 2 0)
place = ONE
current = (2 0)
place = ONE
current = (0)
place = THREE
change in best-count; value of \( r \) is = 42
(1 2 0)
(0)
(3 4 0)
(2 0)
(1 0)
(3 4 0)
(0)
(1 0)
(2 3 4 0)
disc = 2
stages = ((1 2 0) (0) (3 4 0)) ((2 0) (1 0) (3 4 0)) ((0) (1 0) (2 3 4 0
> a
current = (0)
place = THREE
disc = 1
current = (1 2 3 4 0)
place = ONE
current = (2 3 4 0)
place = TWO
current = (3 4 0)
place = TWO
current = (3 4 0)
place = THREE

248
change in best-count; value of r is = 9
(2 3 4 0)
(1 0)
(0)
(3 4 0)
(1 0)
(2 0)
(3 4 0)
(0)
(1 2 0)
disc= 1
stages= ((2 3 4 0) (1 0) (0))((3 4 0) (1 0) (2 0))((3 4 0) (0) (1 2 0)
> a
current = (4 0)
place= THREE
current = (1 4 0)
place= ONE
current = (1 4 0)
place= ONE
current = (4 0)
place= TWO

change in best-count; value of r is = 21
(1 4 0)
(3 0)
(2 0)
(1 4 0)
(2 3 0)
(0)
(4 0)
(1 2 3 0)
(0)
disc= 1
stages= ((1 4 0) (3 0) (2 0))((1 4 0) (2 3 0) (0))((4 0) (1 2 3 0) (0)
> a
current = (0)
place= TWO
current = (0)
place= THREE
current = (2 0)
place= THREE
current = (1 2 0)
place= ONE
current = (1 2 0)
place= ONE
current = (2 0)
place = TWO
change in best-count; value of r is = 39
(1 2 0)
(3 0)
(4 0)
(1 2 0)
(0)
(3 4 0)
(2 0)
(1 0)
(3 4 0)
disc = 1
stages = ((1 2 0) (3 0) (4 0))((1 2 0) (0) (3 4 0))((2 0) (1 0) (3 4 0)
> a
current = (0)
place = TWO
current = (0)
place = THREE
overall-best 7
overall-best 7
best-disc 4
in peg THREE

" best-stages "
((1 4 0) (2 3 0) (0))
((4 0) (1 2 3 0) (0))
((0) (1 2 3 0) (4 0))
> a
current-lerst = ROTE-LEARNING
"for applicability-conditions-1"
old wt = -12
new wt = -14
"for applicability-conditions-2"
old wt = -5
new wt = -7
> a
current-lerst = LEARNING-BY-BEING-TOLD-AND-ASKING-QUESTIONS
"for applicability-conditions-1"
old wt = -12
new wt = -14
"for applicability-conditions-2"
old wt = -5
new wt = -7
> a
current-lerst = LEARNING-BY-DEDUCTION
"for applicability-conditions-1"
old wt = -12
new wt = -14
"for applicability-conditions-2"
old wt = -5
new wt = -7

> a
current-lerst = LEARNING-BY-INDUCTION
"for applicability-conditions-1"
old wt = -12
new wt = -14
"for applicability-conditions-2"
old wt = -5
new wt = -7

> a
current-lerst = LEARNING-BY-INDUCTION-FROM-EXAMPLES
"for applicability-conditions-1"
old wt = -12
new wt = -14
"for applicability-conditions-2"
old wt = -5
new wt = -7

> a
current-lerst = LEARNING-BY-INDUCTION-FROM-OBSERVATION-AND-DISCOVERY
"for applicability-conditions-1"
old wt = -12
new wt = -14
"for applicability-conditions-2"
old wt = -5
new wt = -7

> a
current-lerst = LEARNING-BY-INDUCTION-FROM-EXPERIMENTATION
"for applicability-conditions-1"
old wt = -12
new wt = -14
"for applicability-conditions-2"
old wt = -5
new wt = -7

> a
current-lerst = LEARNING-BY-INDUCTION-FROM-EXPLANATION-BASED-LEARNING
"for applicability-conditions-1"
old wt = -12
new wt = -14
"for applicability-conditions-2"
old wt = -5
new wt = -7
(S M B 2 L2 L3 2) 1
FINAL = (S M B 2 L2 L3 2)
1 = (B S M 3 L1 L2 1)
(B S M 3 L1 L2 2) 1
FINAL = (B S M 3 L1 L2 2)
1 = (M B S 2 L1 L2 1)
(M B S 2 L1 L2 2) 1
FINAL = (M B S 2 L1 L2 2)
1 = (M S B 3 L1 L2 1)
(M S B 3 L1 L2 2) 1
FINAL = (M S B 3 L1 L2 2)
1 = (B M S 4 L3 L1 1)
(B M S 4 L3 L1 2) 1
FINAL = (B M S 4 L3 L1 2)
1 = (M B S 3 L3 L1 1)
(M B S 3 L3 L1 2) 1
FINAL = (M B S 3 L3 L1 2)
1 = (S B M 3 L3 L2 1)
(S B M 3 L3 L2 2) 1
FINAL = (S B M 3 L3 L2 2)
1 = (S B M 2 L2 L1 1)
(S B M 2 L2 L1 2) 1
FINAL = (S B M 2 L2 L1 2)
"searching for new moves"
IP = (B M S 2 L1 L3 1)
(B M S 1 L1 L2)
"new move"
(B S M 3 L2 L3 1)
"new move"
(B S M 3 L1 L2 1)
"new move"
(B M S 4 L3 L1 1)
"new move"
(S B M 3 L3 L2 1)
"new move"
(M B S 2 L1 L2 1)
"new move"
(B M S 4 L1 L3 1)
"new move"
(S M B 4 L2 L3 1)
"new move"
(S B M 2 L2 L1 1)
"new move"
(M B S 3 L3 L1 1)
"new move"
(S M B 4 L2 L3 1)
"new move"
(M S B 3 L1 L2 1)
"new move"
(M S B 3 L1 L3 1)
"new move"
(S M B 2 L2 L3 1)