

## CSE341 – Programming Languages (Fall 2020) Homework #4

Muhammed ÖZKAN 151044084

### Part1:

?- route(edirne,X).  
edremit  
erzincan  
false.

?- route(istanbul,X).  
antalya  
izmir  
gaziantep  
ankara  
van  
rize  
konya  
gaziantep  
izmir

gaziantep  
ankara  
van  
rize  
isparta  
burdur  
konya  
van  
rize  
false.

?- route(ankara,X).  
istanbul  
konya  
van  
antalya  
izmir  
gaziantep  
van

rize  
konya  
gaziantep  
van  
rize  
isparta  
burdur  
false.

### Part2:

*?- sroute(edremit,erzincan,X).*  
*X = 1066.*

*?- sroute(edremit,edirne,X).*  
*X = 235.*

*?- sroute(ankara,edirne,X).*  
*false.*

*?- sroute(ankara,van,X).*  
*X = 920*

### Part3:

Please press the space bar if you want to show the next result.

*?- schedule(a,P,T).*  
*P = z23,*  
*T = 10 ;*  
*P = z11,*  
*T = 12.*

*?- usage(207,T).*  
*T = 16 ;*  
*T = 17.*

*?- conflict(455,452).*  
*true.*

*?- conflict(455,102).*  
*false.*

*?- meet(a,b).*  
*true.*

*?- meet(a,d).*  
*false.*

### Part4:

?- element(5,[1,2,3,4,5]).  
true.

?- element(5,[1,2,3,4]).  
false.

?- union([1,2],[3,4],[1,2,3,4]).  
true.

?- union([1,2],[3,4],[1,2,3,4,5]).  
false.

?- intersect([1,2,3],[3,4],[1,2,3,4,5]).  
false.

?- intersect([1,2,3],[3,4],[3]).  
true.

?- equivalent([1,2,3],[3,4,1,2]).  
false.

?- equivalent([1,2,3,4],[3,4,1,2]).  
true.

**Part5:**

Please editing own your on path line 9 and 10

?- test.

$$5*3+5-7 = 13$$

$$4/2+5+4 = 11$$

$$4-2+5+4 = 11$$

$$(5-3+5)*7 = 49$$

true.

?- solve([4,2,5,4,11]).

$$4/2+5+4 = 11$$

$$4-2+5+4 = 11$$

true.

?- testfile.

$$(5-3+5)*7 = 49$$

True

(Read input.txt and result write equation output.txt)

Part6:

Please editing own your on path line 9

?- test.

xxx  
xx x  
xxx xx  
xx xx  
xxxxxx  
x xxxxx  
xxxxxx  
x  
xx

xxx x  
xx xxxx x  
x xxx xxx  
xx xxxx  
xxx xxx x xxx  
xxx xx xx x xxx  
xx xx xx xx xx  
xx x x xx x x  
x xx x xxxx  
x x xx xx  
xx xx xxxxxxxx  
xx xx xx xxxx  
x xx xx x x x  
xxx xxx xxxxx x  
x x xxx x x xx  
xx xxx x xxx xxx  
x xxx xx xxxxxxxx  
xxxx xxx xxxxxxxx  
x xxxx xx xxxxx  
x xxxx xx xx  
xxxx xx xxxxx  
xxxxx xxx xxxxx  
xxxx x x  
xxxx xx  
xxx xxx

xxxxx  
xx xxx xx  
xx xxxxx x  
xx xxxxxxxx

```

XX  XXXXX XXXXXXXXXXXXX
X X XX  X  XXXXXX
X XX  X   XXX
XX    X     X
XX  XXXXXX   XX
XXXXXXXXXXXXXXXXXXXX XXXX
XXXXXXXXXXXX XXXXXXXX
XX X XXXX XXX XXXXXX
XXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXX
X  XXXXXXXXXXXXXXXX
X X XXXXXXXXXXXXXXXX
XXXXX  XXXXXXXXXXXX
      XXXXXXXX
      XXXXXXXX

```

*true.*

?- solve([[2], [1,1], [1,1], [2], [2,1], [1,2,2], [4,1], [3]], [[2], [1,1], [2], [2,4], [1,1,2], [1,1,1,1], [2,2], [0]]).

```

XX
X X
X X
XX
XX X
X XX XX
XXXX X
XXX
true.

```

(result bitmap write output.txt)