CSE 341 – PROGRAMMING LANGUAGES

HOMEWORK 4

BERKE BELGIN

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1)

Tests:

```
?- route(burdur, isparta).
true ;
false.

?- route(istanbul, moskova).
false.
```

```
?- route(istanbul, X).
X = antalya ;
X = konya ;
X = ankara ;
X = van ;
X = rize ;
X = gaziantep ;
X = izmir ;
X = isparta ;
X = burdur ;
false.
```

2)

Tests:

```
?- sroute(istanbul,Y,D).
Y = antalya,
D = 482 ;
Y = ankara,
D = 351 ;
Y = van,
D = 1262 ;
Y = rize,
D = 967 ;
Y = gaziantep,
D = 847 ;
Y = izmir,
D = 328 ;
false.
```

3)

Tests:

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

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

```
?- conflict(X,Y).
X = Y, Y = 102 ;
X = Y, Y = 108 ;
X = Y, Y = 341 ;
X = Y, Y = 455 ;
X = Y, Y = 452.
```

```
?- meet(X,Y).
X = Y, Y = a ;
X = a,
Y = b ;
X = Y, Y = a ;
X = a,
Y = c ;
X = b,
Y = a ;
X = Y, Y = b ;
X = c,
Y = a ;
X = Y, Y = c ;
X = Y, Y = d ;
X = Y, Y = e ;
false.
```

4)

Tests:

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

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

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

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

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

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

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