

This project allows to test time needed by prim, kruskal, djijkstra and ford-bellman algorithms.

User can choose to load a graph or create random one, then user can test each of previously mentioned algorithms. There is also possibility to test data from files.

Below there are few screens from application, first one shows menu

```
Menu:  
  
Wybierz:  
  
1.   Wczytaj graf  
2.   Stworz losowy graf  
3.   Prim  
4.   Kruskal  
5.   Dijkstra  
6.   Ford Bellman  
7.   Test  
8.   readme  
ESC. back
```

This is how graphs are represented.

Postac macierzowa:

```
0 42 0 41 29 0 100 92 0 37
42 0 72 52 0 12 21 0 0 91
0 72 0 25 0 8 89 57 0 78
41 52 25 0 14 0 0 0 0 64
29 0 0 14 0 0 0 42 48 0
0 12 8 0 0 0 40 0 0 53
100 21 89 0 0 40 0 0 47 51
92 0 57 0 42 0 0 0 86 28
0 0 0 0 48 0 47 86 0 35
37 91 78 64 0 53 51 28 35 0
```

Postac listowa:

```
A [ 0 ] = 9 cost: 37 7 cost: 92 6 cost: 100 4 cost: 29 3 cost: 41 1 cost: 42
A [ 1 ] = 9 cost: 91 6 cost: 21 5 cost: 12 3 cost: 52 2 cost: 72
A [ 2 ] = 9 cost: 78 7 cost: 57 6 cost: 89 5 cost: 8 3 cost: 25
A [ 3 ] = 9 cost: 64 4 cost: 14
A [ 4 ] = 8 cost: 48 7 cost: 42
A [ 5 ] = 9 cost: 53 6 cost: 40
A [ 6 ] = 9 cost: 51 8 cost: 47
A [ 7 ] = 9 cost: 28 8 cost: 86
A [ 8 ] = 9 cost: 35
A [ 9 ] =
```

Prim

```

Prim:
  0  0  0  0 29  0  0  0  0 37
  0  0  0  0  0 12 21  0  0  0
  0  0  0 25  0  8  0  0  0  0
  0  0 25  0 14  0  0  0  0  0
29  0  0 14  0  0  0  0  0  0
  0 12  8  0  0  0  0  0  0  0
  0 21  0  0  0  0  0  0  0  0
  0  0  0  0  0  0  0  0  0 28
  0  0  0  0  0  0  0  0  0 35
37  0  0  0  0  0  0 28 35  0

```

Koszt: 209

```

A [ 0 ] =  9 cost: 37   4 cost: 29
A [ 1 ] =  6 cost: 21
A [ 2 ] =  5 cost:  8
A [ 3 ] =  2 cost: 25
A [ 4 ] =  3 cost: 14
A [ 5 ] =  1 cost: 12
A [ 6 ] =
A [ 7 ] =
A [ 8 ] =
A [ 9 ] =  8 cost: 35   7 cost: 28
Koszt: 209

```

Dijkstra and for-bellman:

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Podaj wierzcholek startowy:

0

0

Dijkstra:

Koszty:

0 42 62 41 29 54 63 65 72 37

Rodzice:

-1 0 5 0 0 1 1 9 9 0

Koszty:

0 42 62 41 29 54 63 65 72 37

Rodzice:

-1 0 5 0 0 1 1 9 9 0

Wcisnij przycisk:

|

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Podaj wierzcholek startowy:

0

0

Ford Bellman:

Koszty:

0 42 62 41 29 54 63 65 72 37

Rodzice:

-1 0 5 0 0 1 1 9 9 0

Koszty:

0 42 62 41 29 54 63 65 72 37

Rodzice:

-1 0 5 0 0 1 1 9 9 0

Wcisnij przycisk: