

### Hamiltonian graphs. Variant 1.

1. Solve the travelling salesman problem using:

- a) the branches and bounds method;
- б) the nearest neighbor method
- в) the Christophides method.

Compare the results.

	<i>a</i>	<i>b</i>	<i>c</i>	<i>d</i>	<i>e</i>	<i>f</i>
<i>a</i>		8	4	6	12	2
<i>b</i>	8		13	9	1	7
<i>c</i>	4	13		16	11	6
<i>d</i>	6	9	16		3	14
<i>e</i>	12	1	11	3		13
<i>f</i>	2	7	6	14	13	

2. Propose an algorithm for the travelling salesmen problem or for the Hamilton problem solving.

### Hamiltonian graphs. Variant 2.

1. Solve the travelling salesman problem using:

- a) the branches and bounds method;
- б) the nearest neighbor method
- в) the Euler method.

Compare the results.

	<i>a</i>	<i>b</i>	<i>c</i>	<i>d</i>	<i>e</i>	<i>f</i>
<i>a</i>		12	4	14	12	7
<i>b</i>	12		13	9	6	7
<i>c</i>	4	13		17	8	6
<i>d</i>	14	9	17		4	3
<i>e</i>	12	6	8	4		11
<i>f</i>	7	7	6	3	11	

2. Propose an algorithm for the travelling salesmen problem or for the Hamilton problem solving.

### Hamiltonian graphs. Variant 3.

1. Solve the travelling salesman problem using:

- a) the branches and bounds method;
- б) the nearest insertion method
- в) the Christophides method.

Compare the results.

	<i>a</i>	<i>b</i>	<i>c</i>	<i>d</i>	<i>e</i>	<i>f</i>
<i>a</i>		12	9	11	2	2
<i>b</i>	12		13	9	10	7
<i>c</i>	9	13		5	11	6
<i>d</i>	11	9	5		3	17
<i>e</i>	2	10	11	3		13
<i>f</i>	2	7	6	17	13	

2. Propose an algorithm for the travelling salesmen problem or for the Hamilton problem solving.

### Hamiltonian graphs. Variant 4.

1. Solve the travelling salesman problem using:

a) the branches and bounds method;

б) the nearest insertion method

в) the Euler method.

Compare the results.

	<i>a</i>	<i>b</i>	<i>c</i>	<i>d</i>	<i>e</i>	<i>f</i>
<i>a</i>		9	4	6	14	2
<i>b</i>	9		5	9	1	11
<i>c</i>	4	5		13	11	7
<i>d</i>	6	9	13		3	14
<i>e</i>	14	1	11	3		2
<i>f</i>	2	11	7	14	2	

2. Propose an algorithm for the travelling salesmen problem or for the Hamilton problem solving.