Solução pelo método da composição latina ou método algébrico - **Exemplo slide 13 – aula4.pdf**

Passos 1 e 2:

A=

0	1	0	1	0
0	0	0	1	1
0	1	0	0	1
0	0	1	0	0
1	0	1	0	0

B=

0	b	0	d	0
0	0	0	d	e
0	b	0	0	e
0	0	c	0	0
a	0	c	0	0

Passo 3: P1←A

Passo 4: P2 ← B x P1; P3←BxP2; P4←BxP3;

B

0	b	0	d	0
0	0	0	d	e
0	b	0	0	e
0	0	c	0	0
A	0	c	0	0

x

P1

0	1	0	1	0
0	0	0	1	1
0	1	0	0	1
0	0	1	0	0
1	0	1	0	0

=

P2

0	0	d	b	b
e	0	d+e	0	0
e	0	e	b	b
0	c	0	0	c
0	a+c	0	a	c

B

0	b	0	d	0
0	0	0	d	e
0	b	0	0	e
0	0	c	0	0
A	0	c	0	0

x

P2

0	0	d	b	b
e	0	d+e	0	0
e	0	0	b	b
0	c	0	0	c
0	a+c	0	a	0

=

P3

be	dc	bd+be	0	dc
0	dc+ea+ec	0	ea	dc
be	ea+ec	bd+be	ea	0
ce	0	0	cb	cb
ce	0	ad	ab+cb	ab+cb

B

0	b	0	d	0
0	0	0	d	e
0	b	0	0	e
0	0	c	0	0
a	0	c	0	0

x

P3

$\underline{0}$	dc	bd+be	0	dc
0	$\underline{0}$	0	ea	dc
be	ea	$\underline{0}$	ea	0
ce	0	0	$\underline{0}$	cb
0	0	ad	ab+cb	$\underline{0}$

=

P4

$\underline{\text{dce}}$	0	0	$\underline{\text{bea}}$	bdc+dcb
dce	0	ead	$\underline{\text{eab+ecb}}$	$\underline{\text{dcb}}$
0	0	$\underline{\text{ead}}$	bea+eab+$\underline{\text{ecb}}$	$\underline{\text{bdc}}$
cbe	cea	0	$\underline{\text{cea}}$	0
$\underline{\text{cbe}}$	adc+$\underline{\text{cea}}$	abd+$\underline{\text{abe}}$	$\underline{\text{cea}}$	$\underline{\text{abc}}$

Os caminhos hamiltonianos são: abdce, adcbe, bdcea, beadc, cbead, ceabd, dcbea, dceab, eabdc.

Se as arestas são valoradas, então pode-se determinar o caminho de menor custo.