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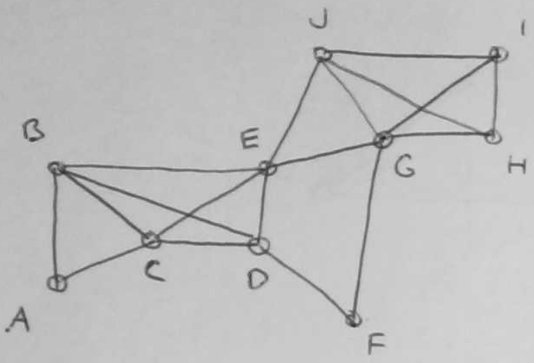
příklad 1.

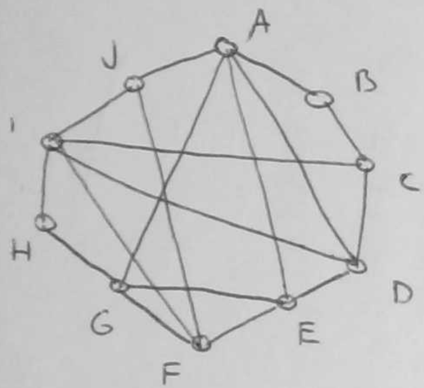
I.



A	B	C	D	E	F	G	H	I	J
2	4	4	4	5	2	5	3	3	4

skóre: (5, 5, 4, 4, 4, 4, 3, 3, 2, 2)

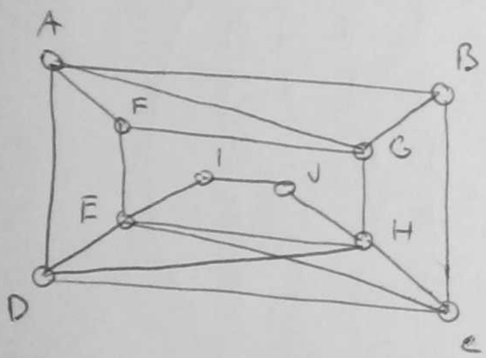
II.



A	B	C	D	E	F	G	H	I	J
5	2	3	4	4	4	4	2	5	3

skóre: (5, 5, 4, 4, 4, 4, 3, 3, 2, 2)

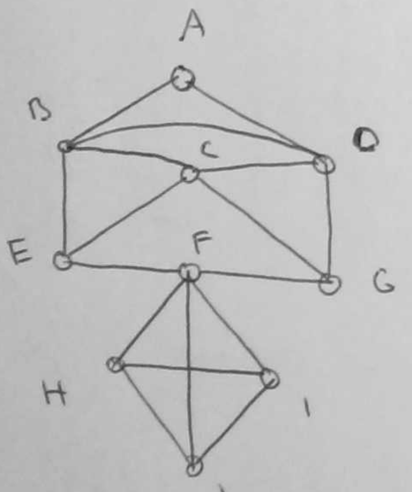
III.



A	B	C	D	E	F	G	H	I	J
4	3	4	4	5	3	4	5	2	2

skóre: (5, 5, 4, 4, 4, 4, 3, 3, 2, 2)

IV.



A	B	C	D	E	F	G	H	I	J
2	4	4	6	4	5	3	3	3	3

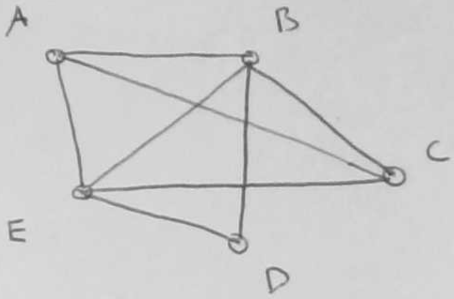
skóre: (5, 5, 4, 4, 4, 3, 3, 3, 3, 2)

Grafy I, II, III mají stejné skóre, tudíž jsou izomorfní.

příklad 2.

$$\begin{array}{c|ccccc} & A & B & C & D & E \\ A & & & & & \\ \end{array}$$

$$\begin{array}{c} A \\ B \\ C \\ D \\ E \end{array}\begin{pmatrix} 0 & 1 & 1 & 0 & 1 \\ 1 & 0 & 1 & 1 & 1 \\ 1 & 1 & 0 & 0 & 1 \\ 0 & 1 & 0 & 0 & 1 \\ 1 & 1 & 1 & 1 & 0 \end{pmatrix} = G$$



$$\begin{pmatrix} 0 & 1 & 1 & 0 & 1 \\ 1 & 0 & 1 & 1 & 1 \\ 1 & 1 & 0 & 0 & 1 \\ 0 & 1 & 0 & 0 & 1 \\ 1 & 1 & 1 & 1 & 0 \end{pmatrix} \cdot \begin{pmatrix} 0 & 1 & 1 & 0 & 1 \\ 1 & 0 & 1 & 1 & 1 \\ 1 & 1 & 0 & 0 & 1 \\ 0 & 1 & 0 & 0 & 1 \\ 1 & 1 & 1 & 1 & 0 \end{pmatrix} = \begin{pmatrix} 3 & 2 & 2 & 2 & 2 \\ 2 & 4 & 2 & 1 & 3 \\ 2 & 2 & 3 & 2 & 2 \\ 2 & 1 & 2 & 2 & 1 \\ 2 & 3 & 2 & 1 & 4 \end{pmatrix} = G^2$$

$$\begin{pmatrix} 0 & 1 & 1 & 0 & 1 \\ 1 & 0 & 1 & 1 & 1 \\ 1 & 1 & 0 & 0 & 1 \\ 0 & 1 & 0 & 0 & 1 \\ 1 & 1 & 1 & 1 & 0 \end{pmatrix} \cdot \begin{pmatrix} 3 & 2 & 2 & 2 & 2 \\ 2 & 4 & 2 & 1 & 3 \\ 2 & 2 & 3 & 2 & 2 \\ 2 & 1 & 2 & 2 & 1 \\ 2 & 3 & 2 & 1 & 4 \end{pmatrix} = \begin{pmatrix} 6 & 9 & 7 & 4 & 9 \\ 9 & 8 & 9 & 7 & 9 \\ 7 & 9 & 6 & 4 & 9 \\ 4 & 7 & 4 & 2 & 7 \\ 9 & 9 & 9 & 7 & 8 \end{pmatrix} = G^3$$

$$\begin{pmatrix} 0 & 1 & 1 & 0 & 1 \\ 1 & 0 & 1 & 1 & 1 \\ 1 & 1 & 0 & 0 & 1 \\ 0 & 1 & 0 & 0 & 1 \\ 1 & 1 & 1 & 1 & 0 \end{pmatrix} \cdot \begin{pmatrix} 6 & 9 & 7 & 4 & 9 \\ 9 & 8 & 9 & 7 & 9 \\ 7 & 9 & 6 & 4 & 9 \\ 4 & 7 & 4 & 2 & 7 \\ 9 & 9 & 9 & 7 & 8 \end{pmatrix} = \begin{pmatrix} 25 & 26 & 24 & 18 & 26 \\ 26 & 34 & 26 & 17 & 33 \\ 24 & 26 & 25 & 18 & 26 \\ 18 & 17 & 18 & 14 & 17 \\ 26 & 33 & 26 & 17 & 34 \end{pmatrix} = G^4$$

Počet sledů délky 4 z bodu 1 do bodu 5 je 26.

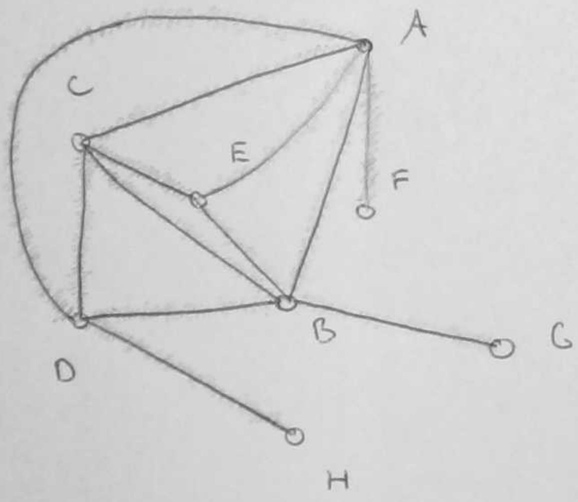
Příklad 3.

a) $(5,\underline{5},\underline{4},\underline{2},\underline{1},\underline{1},1,1) \sim (4,\underline{3},\underline{1},0,0,\underline{1},\underline{1}) \sim$
$(2,0,0,0,0,0)$

$\Rightarrow$ $\underline{\underline{\text{nelze sestrojit}}}$

b) $(\overset{A}{5},\overset{B}{\underline{5}},\overset{C}{\underline{4}},\overset{D}{\underline{4}},\overset{E}{\underline{3}},\overset{F}{\underline{1}},\overset{G}{1},\overset{H}{1}) \sim (\overset{B}{4},\overset{C}{\underline{3}},\overset{D}{\underline{3}},\overset{E}{\underline{2}},\overset{F}{0},\overset{G}{\underline{1}},\overset{H}{1}) \sim$
$(\overset{C}{2},\overset{D}{\underline{2}},\overset{E}{\underline{1}},\overset{F}{0},\overset{G}{0},\overset{H}{1}) \sim (\overset{D}{1},\overset{E}{0},\overset{F}{0},\overset{G}{0},\overset{H}{1})$

$\Rightarrow$ $\underline{\text{lze sestrojit}}$



krok 1.

krok 2. C

krok 3. B

krok 4. A