Tema III - Ex. 2

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a) Consideram urmatorul algormit Ford-Fulkerson modificat.

```
x(u,v)=0 for all (u,v) in E
while exista un drup p de la la t astfel incat cf(u,v)>0 for all (u,v)
    in p
  for (u,v) in p
    x(u,v)=x(u,v)+1 // forward arc
    x(u,v)=x(u,v)-1 // reversed arc
```

Fiecare iteratie a buclei while genereaza un flux de valoare 1.

$$x_i(u, v) = \begin{cases} 1, (u,p) \in p \\ 0, altfel \end{cases} \quad , i \ nr \ de \ iteratii$$

Bucla while se executa de exact v(x) ori generand fluxurile $x_1, x_2, ..., x_{v(x)}$

$$x^1 = x_1 + x + 2 + ... + x_{v_1}$$

$$x^2 = x_{v_1+1} + ... + x_{v_1+v_2}$$

$$...$$

$$x^p = x_{v_1+v_2+...+v_{p-1}+1} + ... + x_{v(x)}$$

$$v(x^1) = v_1$$

$$v(x^2) = v_2$$

$$...$$

$$v(x^p) = v_p$$