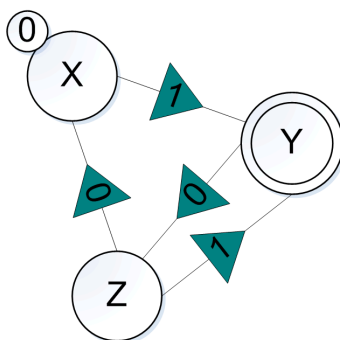


Josip Deak

zadatak 3

Za zadani DKA M (slika!!):

- odredite RI rješavanjem pripadnih skupovnih jednažbi
- konstruirajte ekvivalentni NKA N



Slika 1. DKA M

Rj:

(a)

$$X = 0X + 1Y \quad (1)$$

$$Y = 1X + 0Z + \varepsilon \quad (2)$$

$$Z = 0X + 1Y \quad (3)$$

$$Y = 1X + 0(0X + 1Y) + \varepsilon \quad (3) \rightarrow (2)$$

$$Y = 1X + 00X + 01Y + \varepsilon$$

$$Y = 01Y + 1X + 00X + \varepsilon$$

$$Y = (01)^*(1X + 00X + \varepsilon)$$

$$X = 0X + 1(01)^*(1X + 00X + \varepsilon)$$

$$X = 0X + 1(01)^*1X + 1(01)^*00X + 1(01)^*\varepsilon$$

$$X = (0 + 1(01)^*1 + 1(01)^*0)X + 1(01)^*\varepsilon$$

$$X = (0 + 1(01)^*1 + 1(01)^*0)^*1(01)^*$$

(b)

\Rightarrow Budući je $DKA \subseteq NKA$ gore navedeni DKA je ujedno i NKA ✓

nap :

Točno riješen zadatak nosi 15(a)+5(b) bodova