נעמה אברהמי
200719359

הנדסת תוכנה · תרגיל 0:

1

(א) $\cent(\S x: D \cdot P_x) = 0 \Rightarrow \cent(\text{IF } \langle x: D \to P_x \rangle D \text{ THEN } D \text{ ELSE NULL}) = 0$

$\Rightarrow D \not\to P_x \Rightarrow \exists(x: D \cdot P_x) = \bot \Rightarrow \neg(\exists x: D \cdot P_x)$

(ב) $\cent(\S x: D \cdot P_x) = 1$

$\Rightarrow \exists x: D \cdot P_x \wedge \forall x, y: D \cdot P_x \wedge P_y \to x = y$

(ג) $\cent(\S x: D \cdot P_x) = 2$

$\Rightarrow \exists x: D \cdot P_x \wedge \neg(\exists x, y, z: D \cdot x \neq y \wedge x \neq z \wedge y \neq z \wedge P_x \wedge P_y \wedge P_z)$

2

$\underline{\exists}$: $\exists x: D \cdot P_x \Rightarrow \cent(\S x: D \cdot P_x) \geq 1$

$\underline{\forall}$: $\forall x: D \cdot P_x \Rightarrow \cent(\S x: D \cdot P_x) = |D|$