

HW1

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שאלה 3

סעיף א

Abstraction function: The polynomial that this class represents is the sum of all the PolyTerms in the list terms where each PolyTerm represents a monomial with degree that equals to power and a coefficient that equals coeff .

סעיף ב

Representation invariant: terms is a list of terms in which the last monomial power is always the largest in the list. Every monomial in the list has $\text{coeff} \neq 0$ unless its $\text{power} == 0$.

Terms always contains at least one monomial.

סעיף ג

Representation invariant: terms is an ordered list of terms in the sense that for every PolyTerm term1 and PolyTerm term2, if term1 comes before term2 in terms then $\text{term1.power} > \text{term2.power}$. Every monomial in the list has $\text{coeff} \neq 0$ unless its $\text{power} == 0$. Terms always contains at least one monomial.

כלומר, לא נאפשר כמה מונומים עם דרגה זהה וגם נשמור על המערך ממוין לפי הדרגה. כך נוכל לארוך חיפוש בינארי ולהחזיר את המקדם ברגע שנמצא מונום עם דרגה מתאימה.