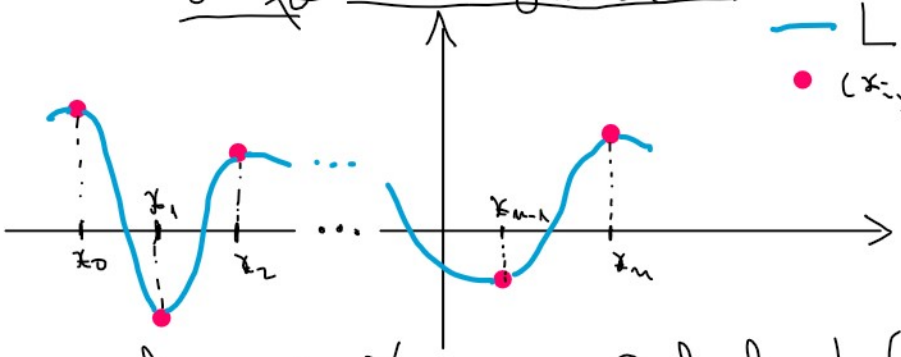
Lab 7

Wednesday, April 12, 2023 12:04 PM

Interpolare Lagrange cu formula Newton

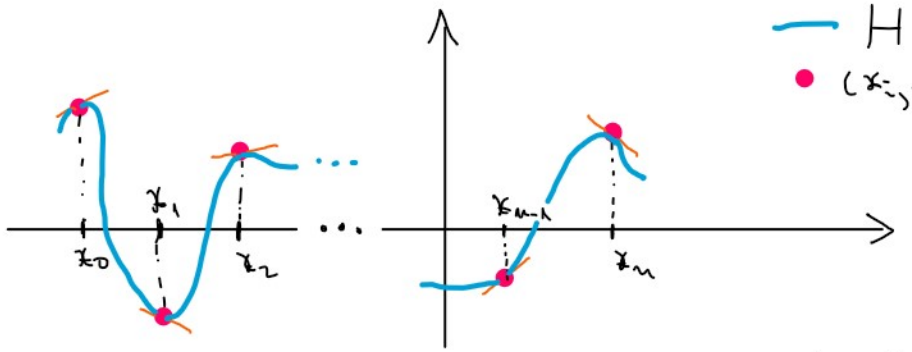


condiție: $L(x_i) = f_i$, $i = \overline{0,n}$

grad $L \leq$ nr. cond. -1

Input: x, f, X Output: $L(X)$

Interpolare Hermite cu noduri duble



$H(x_i) = f_i$

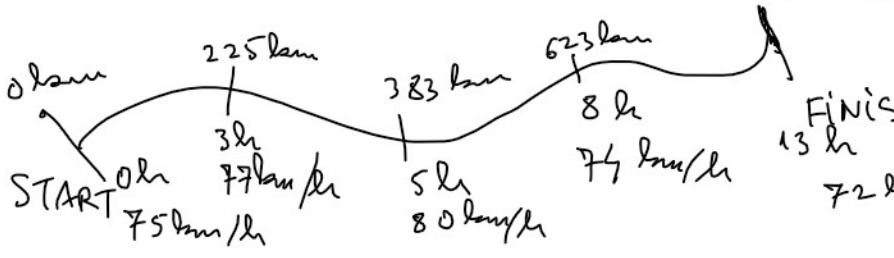
$H'(x_i) = df_i$ $\quad i = \overline{0,n}$

grad $H \leq \underbrace{\text{nr. cond.} - 1}_{2n+1}$

Input: x, f, df, X Output: $H(X), H'(X)$

x	Timpul	0	3	5	8	13
f	Distanța	0	225	383	623	993
df	Viteza	75	77	80	74	72

viteza = derivata distanței în funcție de timp



$d'(t) = \underbrace{v(t)}_{\lim_{\Delta t \to 0}} \frac{d(t+\Delta t) - d(t)}{\Delta t}$

Temă: vectorizați funcția Hermite.