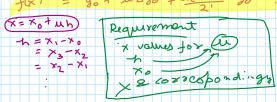




f(x) = yo + u ayo + u(u-v) ayo + u(u-v)(u-2) 13yo + ... + u(u-v)(u-2)... (u-m+1) 2 yo



× y Δy Δy Δy

× y 1 → Δy

× y

here not can see for 5 values of x there are 4 duffrent order jorward dufference

Τ	X _O	x, \	×2	×3	×ч	
ŀ	u,	ч,	у,	73	74	
ŀ	40	-81	21	3 ,	14"	
-1		290	$\triangle 3$ °	D do	4 80	
table						

Step! - create structur table.

type def struct &
float x,
float is;
float forward diff,
y table,

table data [5],

Step3 - Take uput for x & corresponding y

josli=0, 125, 1+4)

j (out 2" x?' == 12="]",

ain >> x,

aut == "y ["=, =="]",

un >> y,

XO	* /	y 2_	×>	×ч
tut	41	47	43	yu
00	7	2	3	4

Styly- Find the USh,

 $u = (x - x_0)/n \quad f_0 = x_0 - x_0$ $x_0 \approx \text{table [a]} \cdot x$ $\text{table [i]} \cdot x$

Styp5 - calculate forward diff.

for (1 = 0; (2(x)++)

