function [**P**]=lagrange(**X**, **Y**)

n=length(**X**);

x=poly(0,"x");

**P**=0;

for i=1:n,

L=1;

for j=[1:i-1,i+1:n]

L=L\*(x-**X**(j))/(**X**(i)-**X**(j));

end

**P**=**P**+L\***Y**(i);

end

endfunction

x=[0;2;4];

-->y=[1;5;17];

-->P=lagrange(x,y)

P =

2

1 + x