**INTRODUCTION TO DIGITAL SPEECH PROCESSING**

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Assignment No. – 01

**MATLAB CODE :**

[y,Fs] = audioread('anshul.wav');

A = y;

p = 2\*((Fs/2)/1000)+2+2; % Order of LPC analysis

Fr = 100; % Frame rate

T\_time = 2; %Total time

Wt = 20/1000; %Window time duration

F = Fr\*T\_time; %Number of windows

Ovrlap\_rat = F\*Wt/T\_time; % Overlap ratio=(No of windows\*Window time duration/Total time)

N = Fs\*Wt; % Samples per window

alphas = zeros(p+1,F);

Corref = zeros(p+1,F);

G = zeros(F);

disp("OUTPUT STARTS HERE")

disp("Total number of available Windows :- "+int2str(F-1));

disp("Order of LPC analysis required :- "+int2str(p));

disp("Samples per window :- "+int2str(N));

disp("Overlap percentage between consecutive windows :- "+num2str(100/Ovrlap\_rat)+"%");

disp(' ');

for k = 1:F-1 %For all windows

q = (k-1)\*(N/Ovrlap\_rat)+(1:N);

frame = A(q);

corr = xcorr(frame); %Cross-correlation

r = corr(N:N+p)/N; %Normalized correlation coefficients

R = toeplitz(r(1:p));

c = r(2:p+1);

a = [1; -R\c]; %LPC coefficient matrix

disp("LPC coefficients for this window :- "+int2str(k));

disp(a);

alphas(:,k) = a;

Error\_MS = r(1);

for t = 2:p+1

Error\_MS = Error\_MS - a(t)\*r(t); %Prediction error

End

G(k) = sqrt(Error\_MS); %Gain

disp(" Normalised Gain for this window is " + num2str(G(k)));

end

mean\_coeff = mean(alphas,2);

standard\_deviation\_coeff = std(alphas,0,2);

r = 1:p+1;

plot(r,mean\_coeff(1:p+1));

axis([1 p+1 -2 2]);

title("Mean corresponding to each coefficient");

xlabel("Sample number(time)");

ylabel("Mean");

snapnow;

disp(mean\_coeff);

plot(r,standard\_deviation\_coeff(1:p+1));

axis([1 p+1 0 1]);

title("Standard Deviation corresponding to each coefficient");

xlabel("Sample number(time)");

ylabel("Standard Deviation");

snapnow;

disp(standard\_deviation\_coeff);

**OUTPUT STARTS HERE**  
Total number of available Windows :- 199  
Order of LPC analysis required :- 20  
Samples per window :- 320  
Overlap percentage between consecutive windows :- 50%  
   
LPC coefficients for this window :- 1  
 1.0000  
 -1.8443  
 1.3067  
 -0.5351  
 0.1837  
 -0.0985  
 0.1179  
 -0.0702  
 0.0526  
 -0.0336  
 -0.0164  
 0.1614  
 -0.1759  
 -0.0276  
 0.0602  
 0.0143  
 0.0537  
 -0.0770  
 -0.0365  
 0.0639  
 0.0230  
  
 Normalised Gain for this window is 0.0085142  
LPC coefficients for this window :- 2  
 1.0000  
 -1.7157  
 1.0232  
 -0.3110  
 0.2411  
 -0.2792  
 0.1521  
 -0.0345  
 0.0216  
 0.0677  
 0.0265  
 -0.0939  
 0.0216  
 0.0573  
 -0.2726  
 0.2677  
 0.1370  
 -0.2503  
 0.0478  
 0.0199  
 0.0319  
  
 Normalised Gain for this window is 0.0076647  
LPC coefficients for this window :- 3  
 1.0000  
 -1.6489  
 0.9140  
 -0.4154  
 0.5757  
 -0.7185  
 0.4541  
 -0.2637  
 0.2679  
 -0.1202  
 0.0064  
 0.0561  
 -0.1649  
 0.2227  
 -0.3126  
 0.1704  
 0.2460  
 -0.3127  
 0.0926  
 -0.0124  
 -0.0130  
  
 Normalised Gain for this window is 0.0092919  
LPC coefficients for this window :- 4  
 1.0000  
 -1.3472  
 0.2659  
 -0.0423  
 0.3858  
 -0.3007  
 0.1235  
 -0.0700  
 0.1275  
 -0.1561  
 0.0078  
 0.1634  
 -0.2765  
 0.1506  
 -0.0474  
 0.0019  
 0.1368  
 -0.2270  
 0.1924  
 -0.0824  
 0.0107  
  
 Normalised Gain for this window is 0.01274  
LPC coefficients for this window :- 5  
 1.0000  
 -1.4457  
 0.4291  
 -0.2810  
 0.6408  
 -0.3889  
 0.1507  
 -0.1161  
 0.1910  
 -0.0974  
 -0.1049  
 0.1067  
 -0.3071  
 0.2669  
 -0.0613  
 -0.0354  
 0.1327  
 -0.1861  
 0.2530  
 -0.2776  
 0.1468  
  
 Normalised Gain for this window is 0.015704  
LPC coefficients for this window :- 6  
 1.0000  
 -1.5222  
 0.4089  
 0.0206  
 0.4372  
 -0.3766  
 0.1340  
 -0.0372  
 0.1515  
 -0.2157  
 -0.0970  
 0.1239  
 -0.1196  
 0.1922  
 -0.0699  
 -0.0923  
 0.1905  
 -0.2002  
 0.0791  
 -0.1309  
 0.1461  
  
 Normalised Gain for this window is 0.014528  
LPC coefficients for this window :- 7  
 1.0000  
 -1.6052  
 0.4745  
 0.0744  
 0.3556  
 -0.3189  
 0.1766  
 -0.0650  
 -0.0964  
 -0.0308  
 -0.0049  
 0.2275  
 -0.2351  
 0.1139  
 -0.0406  
 -0.0738  
 0.2021  
 -0.1555  
 0.0742  
 -0.1267  
 0.1050  
  
 Normalised Gain for this window is 0.013157  
LPC coefficients for this window :- 8  
 1.0000  
 -2.0874  
 1.6345  
 -1.0279  
 1.1897  
 -1.4297  
 1.3953  
 -0.9968  
 0.6648  
 -0.7872  
 0.7100  
 -0.1756  
 -0.1687  
 0.0982  
 0.0037  
 0.0513  
 -0.0916  
 -0.0121  
 0.1652  
 -0.2177  
 0.1157  
  
 Normalised Gain for this window is 0.013745  
LPC coefficients for this window :- 9  
 1.0000

-1.4971  
 0.4384  
 -0.0019  
 0.1185  
 -0.0095  
 0.0625  
 0.0145  
 -0.0998  
 -0.0304  
 0.0414  
 0.0251  
 -0.0405  
 -0.0315  
 0.0006  
 0.0969  
 0.0005  
 -0.0900  
 0.0613  
 -0.0856  
 0.0814  
  
 Normalised Gain for this window is 0.014059  
LPC coefficients for this window :- 10  
 1.0000  
 -1.6596  
 0.6727  
 -0.0234  
 0.0789  
 0.0213  
 -0.0157  
 0.0054  
 -0.0629  
 -0.0993  
 0.0674  
 0.0253  
 0.0140  
 0.0637  
 -0.0757  
 -0.0058  
 -0.0166  
 -0.0332  
 0.0866  
 -0.0321  
 0.0016  
  
 Normalised Gain for this window is 0.021201  
LPC coefficients for this window :- 11  
 1.0000  
 -1.5389  
 0.5325  
 0.0032  
 0.1203  
 -0.0328  
 0.0341  
 -0.0949  
 -0.0386  
 0.1054  
 -0.1604  
 -0.0046  
 0.1403  
 -0.0657  
 0.0455  
 -0.0198  
 -0.0128  
 0.0090  
 -0.0843  
 0.0810  
 -0.0102  
  
 Normalised Gain for this window is 0.021171  
LPC coefficients for this window :- 12  
 1.0000  
 -1.4533  
 0.4374  
 0.0384  
 0.2589  
 -0.1891  
 -0.0754  
 -0.0002  
 -0.0295  
 0.1326  
 -0.1477  
 0.0199  
 0.1033  
 -0.2054  
 0.0736  
 0.1791  
 -0.1021  
 -0.0300  
 -0.0451  
 0.0543  
 -0.0026  
  
 Normalised Gain for this window is 0.012539  
LPC coefficients for this window :- 13  
 1.0000  
 -1.7676  
 0.9481  
 -0.1309  
 0.2551  
 -0.2886  
 0.0029  
 -0.1605  
 0.2462  
 0.1160  
 -0.3797  
 0.1509  
 0.0311  
 -0.1623  
 0.2112  
 0.0529  
 -0.1674  
 0.0506  
 -0.0920  
 0.1272  
 -0.0241  
  
 Normalised Gain for this window is 0.011057  
LPC coefficients for this window :- 14  
 1.0000  
 -2.0694  
 1.5182  
 -0.4700  
 0.2231  
 -0.1951  
 0.0255  
 -0.2430  
 0.4733  
 -0.1609  
 -0.3161  
 0.4097  
 -0.2571  
 -0.0712  
 0.2619  
 -0.1342  
 0.0658  
 -0.1224  
 -0.0344  
 0.1297  
 -0.0137  
  
 Normalised Gain for this window is 0.01395  
LPC coefficients for this window :- 15  
 1.0000  
 -1.9634  
 1.1678  
 -0.0348  
 -0.0404  
 -0.1301  
 0.0656  
 -0.1827  
 0.2400  
 0.0295  
 -0.2019  
 0.0851  
 0.0037  
 -0.0319  
 -0.0232  
 -0.0157  
 0.0545  
 0.0379  
 -0.1104  
 -0.0052  
 0.0815  
  
 Normalised Gain for this window is 0.016143  
LPC coefficients for this window :- 16  
 1.0000  
 -1.8742  
 0.9424  
 0.0171  
 0.0810  
 -0.0930  
 -0.0123  
 -0.0760  
 0.0292  
 0.1262  
 -0.0349  
 -0.0704  
 0.0532  
 -0.0460  
 -0.0331  
 0.0237  
 -0.0715  
 0.1532  
 -0.1164  
 0.0861  
 -0.0469  
  
 Normalised Gain for this window is 0.024897  
LPC coefficients for this window :- 17  
 1.0000  
 -1.6380  
 0.5844  
 0.1123  
 0.0808  
 -0.0414  
 0.0420  
 -0.0468  
 -0.1010

0.1159  
 -0.0045  
 -0.0249  
 0.0435  
 -0.0821  
 0.0525  
 -0.0355  
 -0.0671  
 0.0741  
 -0.0303  
 0.0805  
 -0.0582  
  
 Normalised Gain for this window is 0.029631  
LPC coefficients for this window :- 18  
 1.0000  
 -1.8018  
 0.7923  
 0.1041  
 0.0843  
 -0.1428  
 0.0966  
 -0.0189  
 -0.1652  
 0.1303  
 0.0083  
 -0.0067  
 0.0338  
 -0.1650  
 0.0998  
 0.0858  
 -0.1364  
 0.1120  
 -0.0962  
 -0.0106  
 0.0586  
  
 Normalised Gain for this window is 0.030826  
LPC coefficients for this window :- 19  
 1.0000  
 -1.5544  
 0.4165  
 0.2084  
 0.0827  
 -0.0473  
 0.0407  
 -0.0422  
 -0.0194  
 0.0508  
 -0.0576  
 -0.0024  
 -0.0117  
 0.0064  
 0.0803  
 -0.0297  
 -0.0323  
 -0.0025  
 -0.0388  
 0.0070  
 0.0480  
  
 Normalised Gain for this window is 0.029126  
LPC coefficients for this window :- 20  
 1.0000  
 -1.7032  
 0.6628  
 0.1639  
 0.0425  
 -0.0890  
 -0.0168  
 0.0058  
 -0.0113  
 0.0928  
 -0.0368  
 -0.0955  
 0.0811  
 0.0495  
 -0.0405  
 -0.0329  
 -0.0190  
 0.0346  
 0.0148  
 -0.0734  
 0.0579  
  
 Normalised Gain for this window is 0.022408  
LPC coefficients for this window :- 21  
 1.0000  
 -1.7449  
 0.7929  
 0.0573  
 0.0279  
 -0.0279  
 -0.0546  
 -0.0112  
 0.1289  
 0.0083  
 -0.1438  
 0.0020  
 0.1155  
 0.0420  
 -0.0564  
 -0.0759  
 0.0037  
 0.0280  
 0.0526  
 -0.0409  
 -0.0050  
  
 Normalised Gain for this window is 0.020296  
LPC coefficients for this window :- 22  
 1.0000  
 -1.5414  
 0.5234  
 0.0401  
 0.1380  
 -0.0244  
 -0.0704  
 -0.0043  
 0.0785  
 0.0716  
 -0.1236  
 0.0284  
 0.0228  
 -0.0781  
 0.0077  
 0.0089  
 0.0296  
 -0.0345  
 0.0618  
 0.0089  
 -0.0985  
  
 Normalised Gain for this window is 0.021511  
LPC coefficients for this window :- 23  
 1.0000  
 -1.8818  
 1.1169  
 -0.2906  
 0.1923  
 -0.0339  
 -0.1603  
 0.1660  
 0.0123  
 -0.0384  
 -0.0083  
 0.0217  
 -0.0168  
 -0.0562  
 -0.0369  
 0.0313  
 0.1198  
 -0.1290  
 0.0608  
 -0.0392  
 -0.0033  
  
 Normalised Gain for this window is 0.02306  
LPC coefficients for this window :- 24  
 1.0000  
 -1.5440  
 0.4908  
 0.0510  
 0.0620  
 0.0345  
 -0.0244  
 0.0228  
 -0.0203  
 -0.0301  
 0.0756  
 -0.0716  
 -0.0164  
 0.0448  
 -0.0688  
 0.0485  
 0.0334  
 -0.0886  
 -0.0034  
 -0.0066  
 0.0525  
  
 Normalised Gain for this window is 0.022627  
LPC coefficients for this window :- 25  
 1.0000  
 -1.6216  
 0.6558  
 -0.0609  
 0.0761  
 0.0243  
 -0.0009  
 -0.0237  
 -0.0568  
 0.0635  
 -0.0220  
 0.0341  
 0.0552  
 -0.1389  
 -0.0005  
 0.0155  
 -0.0377

0.0726  
 -0.0086  
 -0.0354  
 0.0507  
  
 Normalised Gain for this window is 0.017652  
LPC coefficients for this window :- 26  
 1.0000  
 -1.3543  
 0.3505  
 0.0618  
 0.0247  
 -0.0602  
 -0.0112  
 0.0254  
 0.0460  
 -0.0064  
 -0.0754  
 0.0507  
 0.0179  
 -0.0916  
 0.0306  
 0.0041  
 -0.0561  
 0.0479  
 0.0079  
 0.0083  
 0.0315  
  
 Normalised Gain for this window is 0.01341  
LPC coefficients for this window :- 27  
 1.0000  
 -1.4438  
 0.4956  
 -0.0391  
 -0.0091  
 0.0395  
 -0.0407  
 0.0734  
 -0.0035  
 -0.0723  
 0.0157  
 0.0782  
 -0.0221  
 -0.0945  
 0.1121  
 -0.0167  
 -0.1059  
 0.0282  
 -0.0076  
 -0.0353  
 0.0978  
  
 Normalised Gain for this window is 0.011527  
LPC coefficients for this window :- 28  
 1.0000  
 -1.5033  
 0.5267  
 -0.0200  
 0.1120  
 0.0172  
 -0.0008  
 -0.1460  
 0.0096  
 0.0340  
 0.0046  
 0.0919  
 -0.0815  
 -0.0879  
 0.1486  
 0.0105  
 -0.0743  
 -0.0255  
 0.0449  
 0.0548  
 -0.0627  
  
 Normalised Gain for this window is 0.0086797  
LPC coefficients for this window :- 29  
 1.0000  
 -2.0277  
 1.6791  
 -1.1146  
 1.0375  
 -0.7992  
 0.4972  
 -0.3031  
 -0.1325  
 0.3366  
 -0.0644  
 -0.0515  
 0.0348  
 -0.2993  
 0.3995  
 -0.1176  
 -0.0082  
 -0.0045  
 -0.0774  
 0.1478  
 -0.1009  
  
 Normalised Gain for this window is 0.0083332  
LPC coefficients for this window :- 30  
 1.0000  
 -1.5488  
 0.6668  
 -0.0722  
 0.1548  
 -0.1128  
 0.1166  
 -0.0255  
 -0.2744  
 0.2001  
 0.0964  
 -0.1476  
 0.0266  
 -0.0117  
 -0.0097  
 -0.0203  
 0.0635  
 0.0325  
 -0.0461  
 0.0514  
 -0.0929  
  
 Normalised Gain for this window is 0.0088306  
LPC coefficients for this window :- 31  
 1.0000  
 -1.9169  
 1.5859  
 -1.1235  
 1.0172  
 -0.7787  
 0.5653  
 -0.1835  
 -0.3925  
 0.5496  
 -0.2982  
 0.0384  
 -0.0106  
 -0.0218  
 0.0897  
 -0.1403  
 0.1604  
 -0.1159  
 0.0205  
 0.1164  
 -0.1216  
  
 Normalised Gain for this window is 0.0088882  
LPC coefficients for this window :- 32  
 1.0000  
 -1.9220  
 1.5298  
 -1.0289  
 0.9831  
 -0.8124  
 0.6478  
 -0.5566  
 0.2145  
 0.1114  
 -0.1645  
 -0.0689  
 0.1099  
 0.0425  
 -0.1444  
 0.2576  
 -0.3147  
 0.1337  
 0.0001  
 0.1795  
 -0.1706  
  
 Normalised Gain for this window is 0.0098366  
LPC coefficients for this window :- 33  
 1.0000  
 -1.5552  
 0.6398  
 -0.0006  
 0.0921  
 -0.0146  
 -0.0786  
 -0.1237  
 0.1145  
 0.0365  
 -0.1464  
 -0.0536  
 0.0815  
 0.0689  
 -0.0984  
 0.0318  
 -0.0055  
 -0.0629  
 0.0809  
 0.1095  
 -0.0904  
  
 Normalised Gain for this window is 0.013144  
LPC coefficients for this window :- 34  
 1.0000

-2.0172  
 1.5821  
 -0.8348  
 0.6287  
 -0.3990  
 0.1806  
 -0.3981  
 0.6050  
 -0.5259  
 0.1632  
 0.0240  
 -0.1450  
 0.3226  
 -0.3545  
 0.2848  
 -0.3613  
 0.4108  
 -0.2887  
 0.2067  
 -0.0762  
  
 Normalised Gain for this window is 0.017235  
LPC coefficients for this window :- 35  
 1.0000  
 -1.5391  
 0.4741  
 0.1358  
 0.0710  
 -0.0952  
 -0.0856  
 0.0219  
 0.0959  
 -0.1109  
 -0.0085  
 0.0826  
 -0.0771  
 0.0545  
 0.0642  
 -0.0459  
 -0.0870  
 0.0492  
 0.0372  
 -0.0130  
 -0.0103  
  
 Normalised Gain for this window is 0.017712  
LPC coefficients for this window :- 36  
 1.0000  
 -2.0236  
 1.3833  
 -0.4018  
 0.1554  
 -0.1107  
 -0.0361  
 0.0608  
 0.0188  
 -0.0392  
 0.0304  
 -0.0584  
 -0.0182  
 0.1121  
 -0.0188  
 0.0019  
 -0.1654  
 0.1094  
 0.1344  
 -0.2346  
 0.1171  
  
 Normalised Gain for this window is 0.015417  
LPC coefficients for this window :- 37  
 1.0000  
 -1.9727  
 1.2642  
 -0.3535  
 0.3520  
 -0.4985  
 0.3559  
 -0.0846  
 -0.1113  
 0.2006  
 -0.1520  
 -0.0097  
 -0.0655  
 0.2001  
 -0.1720  
 0.0264  
 0.1034  
 -0.2255  
 0.4595  
 -0.6104  
 0.3154  
  
 Normalised Gain for this window is 0.014024  
LPC coefficients for this window :- 38  
 1.0000  
 -1.5906  
 0.4769  
 0.1262  
 0.1671  
 -0.1115  
 -0.0204  
 0.0228  
 -0.0288  
 0.0629  
 -0.0023  
 -0.1685  
 0.0392  
 0.1651  
 -0.1263  
 0.0094  
 0.0641  
 -0.0041  
 0.0647  
 -0.3163  
 0.2370  
  
 Normalised Gain for this window is 0.015086  
LPC coefficients for this window :- 39  
 1.0000  
 -1.4324  
 0.3207  
 0.0900  
 0.0678  
 0.0297  
 -0.0031  
 -0.0057  
 -0.0417  
 0.0135  
 0.0159  
 -0.0560  
 -0.0004  
 0.0573  
 0.0328  
 -0.0244  
 0.0115  
 0.0417  
 -0.0704  
 -0.0281  
 0.0577  
  
 Normalised Gain for this window is 0.023389  
LPC coefficients for this window :- 40  
 1.0000  
 -1.5980  
 0.5105  
 0.0750  
 0.1128  
 0.0287  
 0.0417  
 -0.1509  
 -0.1411  
 0.1796  
 -0.0007  
 -0.0810  
 0.0816  
 -0.0033  
 0.0331  
 0.0248  
 -0.1476  
 -0.0106  
 0.1237  
 0.0979  
 -0.0996  
  
 Normalised Gain for this window is 0.026401  
LPC coefficients for this window :- 41  
 1.0000  
 -1.4307  
 0.3818  
 0.0733  
 0.1038  
 0.0396  
 0.0170  
 -0.0706  
 -0.1203  
 0.0092  
 0.0770  
 0.0126  
 -0.0059  
 -0.0196  
 0.0220  
 0.0577  
 -0.1064  
 -0.0619  
 0.1016  
 0.1008  
 -0.0328  
  
 Normalised Gain for this window is 0.020678  
LPC coefficients for this window :- 42  
 1.0000  
 -1.8216  
 0.9601  
 -0.1280  
 0.2712  
 -0.2323  
 0.0428  
 -0.1340  
 -0.0399

0.2176  
 0.0807  
 -0.2060  
 -0.0461  
 -0.0511  
 0.2642  
 -0.0386  
 -0.0924  
 -0.0742  
 -0.1559  
 0.4431  
 -0.1797  
  
 Normalised Gain for this window is 0.015518  
LPC coefficients for this window :- 43  
 1.0000  
 -2.3983  
 2.3583  
 -1.7577  
 1.9940  
 -2.3205  
 2.1696  
 -2.1094  
 2.0428  
 -1.7207  
 1.7777  
 -2.0825  
 1.9906  
 -1.7913  
 1.6845  
 -1.3803  
 1.2269  
 -1.3575  
 0.9295  
 -0.1787  
 -0.0312  
  
 Normalised Gain for this window is 0.019339  
LPC coefficients for this window :- 44  
 1.0000  
 -2.1216  
 1.3854  
 -0.3264  
 0.6183  
 -0.9258  
 0.4256  
 -0.1016  
 0.1752  
 0.0576  
 -0.1766  
 -0.1878  
 0.3350  
 -0.0689  
 -0.1158  
 0.0603  
 0.2445  
 -0.5003  
 0.1414  
 0.2526  
 -0.1198  
  
 Normalised Gain for this window is 0.025154  
LPC coefficients for this window :- 45  
 1.0000  
 -1.7975  
 0.8504  
 0.0176  
 0.1126  
 -0.2076  
 -0.0039  
 0.1663  
 -0.0277  
 -0.0102  
 -0.0431  
 -0.1082  
 0.1503  
 0.0296  
 -0.0619  
 -0.0086  
 0.0344  
 -0.1051  
 -0.0071  
 0.1572  
 -0.0517  
  
 Normalised Gain for this window is 0.024929  
LPC coefficients for this window :- 46  
 1.0000  
 -2.3129  
 1.8436  
 -0.4960  
 0.3573  
 -0.8612  
 0.6161  
 -0.0472  
 0.1324  
 -0.2654  
 -0.0238  
 0.0836  
 0.1066  
 -0.1330  
 0.1910  
 -0.2208  
 -0.0432  
 0.2029  
 -0.0376  
 -0.0907  
 0.0600  
  
 Normalised Gain for this window is 0.021109  
LPC coefficients for this window :- 47  
 1.0000  
 -1.7924  
 0.9247  
 0.0379  
 -0.0109  
 -0.1602  
 -0.0048  
 0.1943  
 -0.0253  
 -0.0463  
 -0.0515  
 -0.0046  
 0.0351  
 0.0268  
 0.0755  
 -0.1591  
 -0.0445  
 0.1459  
 -0.0641  
 0.0596  
 -0.0342  
  
 Normalised Gain for this window is 0.016928  
LPC coefficients for this window :- 48  
 1.0000  
 -1.8250  
 1.0046  
 0.0258  
 -0.0842  
 -0.1633  
 0.1344  
 0.0141  
 0.0600  
 0.0172  
 -0.0707  
 -0.0898  
 0.0806  
 0.0814  
 -0.0301  
 -0.1330  
 -0.0703  
 0.2578  
 -0.1546  
 0.1012  
 -0.0754  
  
 Normalised Gain for this window is 0.014494  
LPC coefficients for this window :- 49  
 1.0000  
 -2.5742  
 3.0813  
 -2.4806  
 1.9604  
 -2.1010  
 2.5329  
 -2.6679  
 2.4301  
 -1.9741  
 1.7376  
 -1.7687  
 1.7345  
 -1.4364  
 0.9593  
 -0.6113  
 0.4278  
 -0.3774  
 0.2682  
 -0.0593  
 -0.0373  
  
 Normalised Gain for this window is 0.013243  
LPC coefficients for this window :- 50  
 1.0000  
 -1.6665  
 0.7587  
 0.0454  
 0.0415  
 -0.1067  
 0.0075  
 -0.0261  
 -0.0248  
 0.1085  
 0.0246  
 -0.0662  
 -0.0000  
 -0.0716  
 -0.0482  
 0.1419  
 -0.0907

0.0496  
 -0.0314  
 -0.0360  
 0.0173  
  
 Normalised Gain for this window is 0.014413  
LPC coefficients for this window :- 51  
 1.0000  
 -2.0171  
 1.4050  
 -0.4447  
 0.3374  
 -0.2279  
 -0.0065  
 0.0079  
 -0.1524  
 0.1106  
 0.2713  
 -0.1910  
 -0.1015  
 -0.1759  
 0.1295  
 0.3534  
 -0.3401  
 0.0819  
 -0.0582  
 0.0099  
 0.0213  
  
 Normalised Gain for this window is 0.015298  
LPC coefficients for this window :- 52  
 1.0000  
 -1.6837  
 0.8516  
 0.0075  
 -0.0436  
 -0.0015  
 0.1215  
 -0.2496  
 -0.0458  
 0.1905  
 -0.0246  
 0.0468  
 -0.1094  
 -0.1758  
 0.0784  
 0.1830  
 -0.0123  
 -0.1648  
 0.0256  
 0.0990  
 -0.0765  
  
 Normalised Gain for this window is 0.013096  
LPC coefficients for this window :- 53  
 1.0000  
 -1.8954  
 1.2531  
 -0.3057  
 0.1482  
 -0.2967  
 0.3165  
 -0.1038  
 -0.2238  
 0.1961  
 0.0586  
 -0.1204  
 0.0144  
 -0.1221  
 0.0352  
 0.3580  
 -0.3726  
 0.0070  
 0.2198  
 -0.1125  
 -0.0312  
  
 Normalised Gain for this window is 0.011358  
LPC coefficients for this window :- 54  
 1.0000  
 -1.9321  
 1.3883  
 -0.4664  
 0.3911  
 -0.6099  
 0.5849  
 -0.3105  
 -0.1614  
 0.3801  
 -0.2127  
 -0.0074  
 0.1023  
 -0.1640  
 -0.0742  
 0.4249  
 -0.3239  
 -0.0347  
 0.2253  
 -0.1465  
 0.0031  
  
 Normalised Gain for this window is 0.0089075  
LPC coefficients for this window :- 55  
 1.0000  
 -1.8741  
 1.1772  
 -0.2223  
 0.4066  
 -0.7181  
 0.6148  
 -0.5488  
 0.1678  
 0.2493  
 -0.3190  
 0.0725  
 0.2127  
 -0.3052  
 -0.1946  
 0.6145  
 -0.2451  
 -0.2708  
 0.3692  
 -0.2850  
 0.1617  
  
 Normalised Gain for this window is 0.0088166  
LPC coefficients for this window :- 56  
 1.0000  
 -1.7349  
 0.8225  
 0.0551  
 0.2399  
 -0.4607  
 0.1760  
 -0.1896  
 0.1226  
 0.1069  
 -0.2548  
 0.1731  
 -0.0080  
 -0.0336  
 -0.1397  
 0.2211  
 0.0306  
 -0.2216  
 0.2203  
 -0.2146  
 0.1478  
  
 Normalised Gain for this window is 0.012201  
LPC coefficients for this window :- 57  
 1.0000  
 -1.6032  
 0.6024  
 0.1141  
 0.1419  
 -0.2520  
 -0.0045  
 -0.0062  
 -0.0004  
 -0.0202  
 0.0650  
 0.0664  
 -0.1789  
 0.1170  
 -0.0465  
 -0.0333  
 0.1727  
 -0.0918  
 0.0292  
 -0.1702  
 0.1516  
  
 Normalised Gain for this window is 0.012875  
LPC coefficients for this window :- 58  
 1.0000  
 -1.7205  
 0.7722  
 0.0101  
 0.1495  
 -0.2273  
 0.0520  
 -0.0811  
 0.0218  
 0.1432  
 -0.1109  
 -0.0483  
 0.0034  
 0.1533  
 -0.0383  
 -0.1295  
 0.1066  
 0.0225  
 0.0285  
 -0.2192  
 0.1497  
  
 Normalised Gain for this window is 0.012247  
LPC coefficients for this window :- 59  
 1.0000

-1.7760  
 0.9132  
 -0.1421  
 0.0890  
 -0.0456  
 0.0110  
 0.0735  
 -0.0163  
 -0.0172  
 -0.1174  
 -0.0742  
 0.1460  
 0.1689  
 -0.0871  
 -0.1842  
 0.0683  
 0.0261  
 0.0083  
 -0.0263  
 0.0308  
  
 Normalised Gain for this window is 0.014283  
LPC coefficients for this window :- 60  
 1.0000  
 -1.8799  
 1.2099  
 -0.3161  
 0.0176  
 -0.0642  
 0.1714  
 -0.0402  
 -0.0039  
 0.0675  
 -0.1316  
 -0.0059  
 0.0485  
 0.0762  
 -0.0673  
 -0.1121  
 -0.0006  
 0.0276  
 0.1105  
 -0.0041  
 -0.0563  
  
 Normalised Gain for this window is 0.016127  
LPC coefficients for this window :- 61  
 1.0000  
 -1.4174  
 0.4826  
 0.0732  
 -0.0137  
 -0.0294  
 0.0045  
 0.0695  
 0.0476  
 -0.0051  
 -0.0302  
 -0.0131  
 0.0156  
 0.0215  
 -0.0246  
 -0.0973  
 -0.0418  
 0.0330  
 0.0738  
 0.0849  
 -0.0887  
  
 Normalised Gain for this window is 0.016151  
LPC coefficients for this window :- 62  
 1.0000  
 -1.7989  
 1.0921  
 -0.2551  
 0.1187  
 -0.2701  
 0.2001  
 0.0024  
 0.0001  
 -0.0687  
 0.0825  
 0.0554  
 -0.1693  
 0.1314  
 -0.1305  
 0.0379  
 -0.0114  
 -0.1543  
 0.1365  
 0.1462  
 -0.0976  
  
 Normalised Gain for this window is 0.01466  
LPC coefficients for this window :- 63  
 1.0000  
 -1.4335  
 0.4953  
 0.0358  
 -0.0193  
 -0.0439  
 0.0520  
 -0.0490  
 -0.0551  
 0.0278  
 0.0884  
 0.0518  
 -0.1294  
 -0.0426  
 0.0502  
 -0.0008  
 -0.0560  
 -0.0566  
 0.0317  
 0.0678  
 0.0563  
  
 Normalised Gain for this window is 0.017758  
LPC coefficients for this window :- 64  
 1.0000  
 -1.5303  
 0.6040  
 0.0152  
 -0.0509  
 -0.0291  
 0.0884  
 -0.0788  
 -0.0357  
 0.0770  
 0.0176  
 0.0200  
 -0.0586  
 -0.0383  
 0.0454  
 -0.0082  
 -0.0789  
 -0.0615  
 0.0812  
 0.0448  
 0.0272  
  
 Normalised Gain for this window is 0.019995  
LPC coefficients for this window :- 65  
 1.0000  
 -1.9188  
 1.2438  
 -0.2962  
 -0.0057  
 0.0529  
 0.0714  
 -0.0737  
 -0.0859  
 0.0469  
 -0.0036  
 0.1230  
 -0.1073  
 -0.0906  
 0.1789  
 -0.0988  
 -0.1283  
 0.0830  
 0.1540  
 -0.2116  
 0.0969  
  
 Normalised Gain for this window is 0.017987  
LPC coefficients for this window :- 66  
 1.0000  
 -1.3892  
 0.3564  
 0.0979  
 0.0302  
 0.0635  
 0.0167  
 -0.0340  
 -0.0242  
 -0.0281  
 -0.0184  
 -0.0106  
 -0.0116  
 0.0264  
 0.0457  
 -0.0099  
 -0.0644  
 -0.0116  
 0.0218  
 -0.0097  
 0.0127  
  
 Normalised Gain for this window is 0.015153  
LPC coefficients for this window :- 67  
 1.0000  
 -1.7877  
 0.9016  
 -0.0558  
 0.0638  
 -0.0498  
 0.0118  
 -0.0059  
 -0.1181

-0.0364  
 0.1564  
 0.0381  
 -0.1359  
 -0.0773  
 0.1578  
 -0.0531  
 -0.0415  
 0.2194  
 -0.1990  
 -0.0410  
 0.0883  
  
 Normalised Gain for this window is 0.014853  
LPC coefficients for this window :- 68  
 1.0000  
 -1.3977  
 0.3889  
 0.0332  
 0.0498  
 0.0403  
 -0.0533  
 0.0090  
 -0.0213  
 -0.0414  
 0.0571  
 -0.0183  
 -0.0150  
 -0.0103  
 -0.0192  
 -0.0140  
 0.0164  
 0.1113  
 -0.0552  
 -0.1012  
 0.0853  
  
 Normalised Gain for this window is 0.015632  
LPC coefficients for this window :- 69  
 1.0000  
 -1.9006  
 1.2521  
 -0.3755  
 0.1299  
 -0.1132  
 0.0951  
 -0.0901  
 0.0132  
 0.0378  
 0.0124  
 0.0113  
 -0.0737  
 0.0098  
 0.0095  
 -0.0814  
 0.1104  
 0.1074  
 -0.3339  
 0.1944  
 0.0087  
  
 Normalised Gain for this window is 0.014067  
LPC coefficients for this window :- 70  
 1.0000  
 -1.7232  
 0.8015  
 0.1295  
 -0.0306  
 -0.2456  
 0.0915  
 0.1159  
 -0.0603  
 -0.0017  
 0.0272  
 -0.0799  
 -0.0596  
 0.0912  
 0.0724  
 -0.0932  
 0.0169  
 0.0349  
 -0.1596  
 0.0969  
 0.0160  
  
 Normalised Gain for this window is 0.011114  
LPC coefficients for this window :- 71  
 1.0000  
 -2.0476  
 1.5506  
 -0.6821  
 0.7278  
 -0.8915  
 0.4072  
 0.0563  
 0.0273  
 -0.0621  
 -0.1351  
 0.0756  
 -0.1377  
 0.2337  
 0.0132  
 -0.1786  
 -0.0163  
 0.2314  
 -0.1611  
 -0.0736  
 0.1168  
  
 Normalised Gain for this window is 0.010227  
LPC coefficients for this window :- 72  
 1.0000  
 -2.0265  
 1.4302  
 -0.6227  
 0.7630  
 -0.7558  
 0.1096  
 0.2937  
 -0.1496  
 0.0941  
 -0.2392  
 0.1320  
 -0.0326  
 0.0453  
 0.1120  
 -0.2583  
 0.0931  
 0.1504  
 -0.0738  
 -0.1115  
 0.0973  
  
 Normalised Gain for this window is 0.012019  
LPC coefficients for this window :- 73  
 1.0000  
 -1.9088  
 1.1491  
 -0.3722  
 0.5052  
 -0.4427  
 -0.0628  
 0.2816  
 -0.0576  
 -0.1165  
 0.0339  
 0.0333  
 0.0571  
 -0.1572  
 0.1193  
 -0.0215  
 -0.1325  
 0.3230  
 -0.2010  
 -0.0490  
 0.0639  
  
 Normalised Gain for this window is 0.010785  
LPC coefficients for this window :- 74  
 1.0000  
 -1.9673  
 1.4784  
 -1.0068  
 1.2259  
 -1.1214  
 0.4900  
 -0.1029  
 0.1622  
 -0.2788  
 0.1062  
 0.1315  
 -0.0650  
 -0.1439  
 0.1666  
 0.0068  
 -0.1176  
 0.2155  
 -0.1640  
 -0.0138  
 0.0319  
  
 Normalised Gain for this window is 0.0085071  
LPC coefficients for this window :- 75  
 1.0000  
 -1.7342  
 0.9678  
 -0.5369  
 0.7819  
 -0.5739  
 0.1321  
 0.0688  
 -0.1044  
 -0.0529  
 0.0498  
 0.1522  
 -0.1008  
 -0.1480  
 0.1501  
 0.1019  
 -0.2120

0.1612  
 -0.0699  
 -0.0136  
 0.0158  
  
 Normalised Gain for this window is 0.0082158  
LPC coefficients for this window :- 76  
 1.0000  
 -1.9342  
 1.4107  
 -0.8325  
 0.7853  
 -0.6026  
 0.3185  
 -0.0073  
 -0.2395  
 0.1193  
 -0.0176  
 0.1369  
 -0.0885  
 -0.0932  
 0.1435  
 0.0457  
 -0.1528  
 0.0333  
 -0.0096  
 0.0678  
 -0.0454  
  
 Normalised Gain for this window is 0.0083384  
LPC coefficients for this window :- 77  
 1.0000  
 -1.3998  
 0.4043  
 0.0776  
 -0.0476  
 -0.0009  
 0.0298  
 0.0397  
 -0.0288  
 -0.0666  
 0.0404  
 0.0149  
 -0.0115  
 0.0296  
 0.0183  
 -0.0213  
 0.0046  
 -0.0153  
 -0.0394  
 -0.0206  
 0.0620  
  
 Normalised Gain for this window is 0.010669  
LPC coefficients for this window :- 78  
 1.0000  
 -2.0472  
 1.6442  
 -0.7785  
 0.2463  
 -0.0994  
 0.0597  
 -0.0528  
 0.1768  
 -0.2712  
 0.2993  
 -0.2377  
 0.1195  
 0.0590  
 -0.1726  
 0.2420  
 -0.2479  
 0.1867  
 -0.1567  
 -0.0922  
 0.1687  
  
 Normalised Gain for this window is 0.011808  
LPC coefficients for this window :- 79  
 1.0000  
 -1.3802  
 0.3471  
 0.1592  
 -0.0230  
 -0.0606  
 -0.0635  
 0.0942  
 0.0578  
 -0.0525  
 0.0229  
 -0.0693  
 -0.0091  
 0.0793  
 0.0743  
 -0.0225  
 -0.0730  
 -0.0239  
 -0.0019  
 -0.0135  
 0.0508  
  
 Normalised Gain for this window is 0.0099465  
LPC coefficients for this window :- 80  
 1.0000  
 -1.9312  
 1.1706  
 -0.2117  
 0.0876  
 -0.0811  
 -0.0462  
 0.0338  
 0.2184  
 -0.1759  
 -0.0645  
 0.0944  
 -0.1402  
 0.2000  
 -0.0171  
 -0.1286  
 0.0354  
 -0.0397  
 0.0244  
 0.1218  
 -0.0931  
  
 Normalised Gain for this window is 0.014251  
LPC coefficients for this window :- 81  
 1.0000  
 -2.0184  
 1.2844  
 -0.3829  
 0.3988  
 -0.2146  
 -0.1465  
 -0.0019  
 0.3759  
 -0.2051  
 -0.1370  
 0.1695  
 -0.1745  
 0.1926  
 -0.0879  
 -0.0941  
 0.1696  
 -0.1183  
 -0.1293  
 0.3722  
 -0.2145  
  
 Normalised Gain for this window is 0.016504  
LPC coefficients for this window :- 82  
 1.0000  
 -1.6771  
 0.7542  
 -0.1014  
 0.2249  
 -0.0545  
 -0.1244  
 0.0202  
 -0.0076  
 0.1881  
 -0.1811  
 0.0005  
 0.1152  
 -0.1196  
 0.0852  
 -0.0763  
 0.0047  
 -0.0344  
 -0.0649  
 0.2490  
 -0.1323  
  
 Normalised Gain for this window is 0.013408  
LPC coefficients for this window :- 83  
 1.0000  
 -1.7804  
 0.8715  
 -0.2785  
 0.8062  
 -0.8084  
 0.5829  
 -0.9109  
 1.0203  
 -0.4215  
 -0.1521  
 0.0975  
 0.0696  
 0.1379  
 -0.2235  
 0.0292  
 -0.0101  
 -0.0335  
 -0.0925  
 0.3288  
 -0.1886  
  
 Normalised Gain for this window is 0.012158  
LPC coefficients for this window :- 84  
 1.0000

-1.4624  
 0.3967  
 0.0798  
 0.2451  
 -0.1408  
 0.1970  
 -0.4010  
 0.2716  
 -0.0305  
 -0.2160  
 0.3109  
 -0.1870  
 0.1071  
 -0.1177  
 -0.0432  
 0.2444  
 -0.2623  
 0.0020  
 0.1731  
 -0.0800  
  
 Normalised Gain for this window is 0.01263  
LPC coefficients for this window :- 85  
 1.0000  
 -1.4242  
 0.2946  
 0.0725  
 0.2816  
 -0.1219  
 0.2023  
 -0.2924  
 0.1285  
 -0.0388  
 -0.1544  
 0.2509  
 -0.1214  
 0.0784  
 -0.0453  
 -0.1009  
 0.1953  
 -0.1591  
 0.0044  
 0.0246  
 0.0415  
  
 Normalised Gain for this window is 0.015241  
LPC coefficients for this window :- 86  
 1.0000  
 -1.5570  
 0.5234  
 0.0653  
 0.1188  
 -0.1284  
 0.1739  
 -0.2223  
 0.2106  
 -0.0788  
 -0.1024  
 0.1132  
 -0.0566  
 0.0252  
 -0.0335  
 0.0037  
 0.0361  
 0.0232  
 -0.1251  
 0.0086  
 0.0962  
  
 Normalised Gain for this window is 0.015465  
LPC coefficients for this window :- 87  
 1.0000  
 -1.4592  
 0.4462  
 0.1145  
 0.0767  
 -0.1172  
 0.0878  
 -0.0537  
 0.0289  
 -0.0077  
 0.0061  
 0.0517  
 -0.0761  
 -0.0455  
 0.0338  
 0.0393  
 -0.0208  
 -0.0195  
 -0.0346  
 -0.0193  
 0.0721  
  
 Normalised Gain for this window is 0.011854  
LPC coefficients for this window :- 88  
 1.0000  
 -1.8331  
 1.1089  
 -0.1491  
 0.1243  
 -0.3223  
 0.2098  
 -0.1401  
 0.2297  
 -0.1319  
 -0.0011  
 0.1869  
 -0.2575  
 0.0846  
 0.0852  
 -0.0369  
 -0.0162  
 -0.0319  
 0.1185  
 -0.1970  
 0.1566  
  
 Normalised Gain for this window is 0.012243  
LPC coefficients for this window :- 89  
 1.0000  
 -2.2092  
 2.0753  
 -1.2498  
 0.8913  
 -0.9185  
 0.7838  
 -0.4580  
 0.1948  
 0.0184  
 -0.1593  
 0.3514  
 -0.4321  
 0.3664  
 -0.4146  
 0.4430  
 -0.1141  
 -0.2032  
 0.2923  
 -0.2852  
 0.1548  
  
 Normalised Gain for this window is 0.013993  
LPC coefficients for this window :- 90  
 1.0000  
 -1.7384  
 1.0775  
 -0.2553  
 -0.0245  
 -0.1808  
 0.2786  
 -0.0211  
 -0.1482  
 0.1554  
 0.0357  
 -0.0914  
 0.0156  
 0.0130  
 -0.1837  
 0.2178  
 0.0913  
 -0.1757  
 0.1727  
 -0.1544  
 0.0367  
  
 Normalised Gain for this window is 0.011608  
LPC coefficients for this window :- 91  
 1.0000  
 -2.1229  
 1.9501  
 -1.2454  
 0.9051  
 -0.9930  
 1.0799  
 -0.8260  
 0.3262  
 0.1277  
 -0.2675  
 0.1829  
 -0.0900  
 0.1935  
 -0.5025  
 0.5330  
 -0.0738  
 -0.1869  
 0.2162  
 -0.2721  
 0.1380  
  
 Normalised Gain for this window is 0.0086821  
LPC coefficients for this window :- 92  
 1.0000  
 -1.8453  
 1.3051  
 -0.5746  
 0.4356  
 -0.4951  
 0.4791  
 -0.4142  
 0.0971

0.2437  
 -0.3035  
 0.1549  
 0.0539  
 -0.0145  
 -0.2214  
 0.2790  
 -0.0383  
 -0.0278  
 0.0364  
 -0.2623  
 0.1888  
  
 Normalised Gain for this window is 0.0081275  
LPC coefficients for this window :- 93  
 1.0000  
 -2.0797  
 1.7656  
 -0.9809  
 0.9118  
 -1.2155  
 1.3534  
 -1.2330  
 0.6921  
 -0.1755  
 0.0757  
 -0.1552  
 0.1019  
 0.2191  
 -0.5202  
 0.4881  
 -0.1809  
 0.0392  
 -0.1126  
 0.0327  
 0.0228  
  
 Normalised Gain for this window is 0.0081299  
LPC coefficients for this window :- 94  
 1.0000  
 -1.5550  
 0.5183  
 0.1821  
 0.0530  
 -0.1481  
 0.0149  
 -0.0939  
 0.0723  
 0.0033  
 -0.0656  
 0.1239  
 -0.0428  
 0.0197  
 -0.0668  
 -0.0326  
 0.1373  
 -0.0791  
 -0.0178  
 -0.0876  
 0.0833  
  
 Normalised Gain for this window is 0.013754  
LPC coefficients for this window :- 95  
 1.0000  
 -1.5939  
 0.5346  
 0.1795  
 -0.0086  
 -0.0599  
 -0.0494  
 -0.0375  
 0.1632  
 -0.0579  
 -0.0896  
 0.0775  
 -0.0077  
 0.0005  
 -0.0254  
 -0.0527  
 0.0602  
 0.0584  
 -0.1138  
 -0.1260  
 0.1590  
  
 Normalised Gain for this window is 0.021486  
LPC coefficients for this window :- 96  
 1.0000  
 -1.1619  
 0.0875  
 0.0737  
 0.0463  
 0.0112  
 -0.0055  
 -0.0141  
 -0.0250  
 -0.0052  
 0.0097  
 0.0104  
 0.0101  
 0.0174  
 0.0157  
 -0.0157  
 -0.0342  
 -0.0240  
 -0.0313  
 -0.0553  
 0.1046  
  
 Normalised Gain for this window is 0.050863  
LPC coefficients for this window :- 97  
 1.0000  
 -1.1201  
 0.0510  
 0.0518  
 0.0324  
 0.0004  
 -0.0112  
 -0.0296  
 -0.0315  
 -0.0223  
 -0.0085  
 0.0242  
 0.0340  
 0.0192  
 0.0176  
 0.0164  
 -0.0012  
 -0.0114  
 -0.0253  
 -0.0292  
 0.0558  
  
 Normalised Gain for this window is 0.17628  
LPC coefficients for this window :- 98  
 1.0000  
 -1.1339  
 0.0691  
 0.0400  
 0.0168  
 0.0057  
 -0.0154  
 -0.0442  
 -0.0410  
 -0.0215  
 0.0057  
 0.0286  
 0.0393  
 0.0528  
 0.0396  
 0.0015  
 -0.0012  
 -0.0129  
 -0.0431  
 -0.0323  
 0.0557  
  
 Normalised Gain for this window is 0.20661  
LPC coefficients for this window :- 99  
 1.0000  
 -1.0731  
 0.0322  
 0.0340  
 0.0104  
 -0.0034  
 -0.0014  
 -0.0181  
 -0.0222  
 -0.0128  
 -0.0000  
 0.0182  
 0.0200  
 0.0163  
 0.0156  
 0.0070  
 -0.0077  
 -0.0158  
 -0.0176  
 -0.0112  
 0.0441  
  
 Normalised Gain for this window is 0.13441  
LPC coefficients for this window :- 100  
 1.0000  
 -1.1600  
 0.0805  
 0.0596  
 0.0506  
 0.0016  
 -0.0099  
 -0.0101  
 -0.0461  
 -0.0249  
 0.0010  
 0.0188  
 0.0325  
 -0.0013  
 -0.0001  
 0.0276  
 -0.0041

-0.0179  
 -0.0155  
 -0.0208  
 0.0477  
  
 Normalised Gain for this window is 0.10033  
LPC coefficients for this window :- 101  
 1.0000  
 -1.1991  
 0.0988  
 0.0679  
 0.0305  
 0.0091  
 -0.0180  
 -0.0185  
 0.0159  
 0.0006  
 -0.0137  
 0.0006  
 0.0246  
 0.0014  
 -0.0091  
 0.0321  
 -0.0091  
 -0.0120  
 -0.0014  
 -0.0313  
 0.0372  
  
 Normalised Gain for this window is 0.083396  
LPC coefficients for this window :- 102  
 1.0000  
 -1.2073  
 0.0763  
 0.0674  
 0.0514  
 0.0230  
 -0.0027  
 0.0092  
 -0.0179  
 -0.0249  
 0.0152  
 -0.0192  
 -0.0055  
 0.0167  
 -0.0149  
 0.0340  
 0.0095  
 -0.0382  
 0.0157  
 0.0068  
 0.0129  
  
 Normalised Gain for this window is 0.083625  
LPC coefficients for this window :- 103  
 1.0000  
 -1.1325  
 0.0502  
 0.0228  
 0.0192  
 0.0332  
 0.0098  
 -0.0136  
 0.0135  
 0.0066  
 -0.0281  
 -0.0280  
 -0.0186  
 0.0057  
 0.0230  
 0.0010  
 0.0194  
 0.0402  
 -0.0025  
 -0.0067  
 -0.0068  
  
 Normalised Gain for this window is 0.10205  
LPC coefficients for this window :- 104  
 1.0000  
 -1.1591  
 0.0598  
 0.0702  
 0.0411  
 0.0022  
 -0.0098  
 -0.0362  
 -0.0300  
 0.0002  
 0.0032  
 -0.0001  
 0.0183  
 0.0360  
 0.0227  
 -0.0032  
 -0.0197  
 -0.0111  
 -0.0043  
 -0.0025  
 0.0325  
  
 Normalised Gain for this window is 0.10457  
LPC coefficients for this window :- 105  
 1.0000  
 -1.3241  
 0.2687  
 0.1206  
 -0.0245  
 -0.0400  
 0.0538  
 0.0405  
 -0.0537  
 -0.0533  
 -0.0303  
 -0.0382  
 0.0103  
 0.0558  
 0.0285  
 -0.0401  
 -0.0253  
 0.0322  
 0.0205  
 -0.0200  
 0.0338  
  
 Normalised Gain for this window is 0.093328  
LPC coefficients for this window :- 106  
 1.0000  
 -1.0951  
 0.0659  
 0.0484  
 0.0466  
 0.0496  
 0.0313  
 0.0023  
 -0.0229  
 -0.0291  
 -0.0140  
 -0.0009  
 -0.0001  
 0.0025  
 -0.0020  
 -0.0156  
 -0.0140  
 0.0093  
 0.0196  
 -0.0052  
 0.0009  
  
 Normalised Gain for this window is 0.21479  
LPC coefficients for this window :- 107  
 1.0000  
 -1.9218  
 1.0537  
 0.1188  
 -0.3516  
 0.0594  
 0.2319  
 -0.1081  
 -0.0926  
 0.1556  
 -0.0390  
 -0.2756  
 0.0709  
 0.2942  
 -0.0146  
 -0.1838  
 0.0206  
 0.1182  
 -0.0637  
 -0.0325  
 -0.0065  
  
 Normalised Gain for this window is 0.57196  
LPC coefficients for this window :- 108  
 1.0000  
 -1.5609  
 0.6088  
 0.0380  
 -0.1043  
 0.0927  
 0.0832  
 -0.0579  
 0.0011  
 0.0721  
 -0.0513  
 -0.1454  
 -0.0352  
 0.1382  
 0.1227  
 -0.0224  
 -0.0470  
 -0.0098  
 -0.0156  
 0.0258  
 -0.0505  
  
 Normalised Gain for this window is 0.69139  
LPC coefficients for this window :- 109  
 1.0000

-1.4651  
 0.4995  
 0.0555  
 -0.0596  
 0.0666  
 0.0318  
 -0.0510  
 0.0347  
 0.1233  
 -0.0570  
 -0.2321  
 -0.0403  
 0.2247  
 0.1403  
 -0.1056  
 -0.0795  
 0.0696  
 0.0480  
 -0.0208  
 -0.0870  
  
 Normalised Gain for this window is 0.67677  
LPC coefficients for this window :- 110  
 1.0000  
 -2.0577  
 1.5908  
 -0.5572  
 -0.1941  
 0.3882  
 0.0355  
 -0.2048  
 0.0590  
 0.1594  
 -0.1705  
 -0.2228  
 0.1381  
 0.2220  
 -0.0228  
 -0.0934  
 0.0248  
 0.0316  
 -0.1117  
 0.1125  
 -0.0661  
  
 Normalised Gain for this window is 0.71134  
LPC coefficients for this window :- 111  
 1.0000  
 -1.5175  
 0.5934  
 0.0033  
 -0.0961  
 0.1006  
 0.0783  
 -0.0431  
 0.0234  
 0.0832  
 -0.0907  
 -0.1988  
 -0.0003  
 0.2010  
 0.1162  
 -0.0699  
 -0.0640  
 0.0241  
 0.0164  
 0.0340  
 -0.0823  
  
 Normalised Gain for this window is 0.65881  
LPC coefficients for this window :- 112  
 1.0000  
 -2.0458  
 1.5544  
 -0.5932  
 -0.1854  
 0.4192  
 0.0574  
 -0.1615  
 0.0592  
 0.0696  
 -0.1702  
 -0.2192  
 0.1056  
 0.2825  
 -0.0059  
 -0.1158  
 0.0726  
 -0.0025  
 -0.1428  
 0.0513  
 0.0101  
  
 Normalised Gain for this window is 0.62964  
LPC coefficients for this window :- 113  
 1.0000  
 -1.7944  
 1.0324  
 -0.2137  
 -0.2033  
 0.2773  
 0.1275  
 -0.1709  
 -0.0125  
 0.1440  
 -0.1158  
 -0.2213  
 0.0639  
 0.2051  
 0.0589  
 -0.1120  
 0.0058  
 0.0794  
 -0.0660  
 -0.0370  
 -0.0061  
  
 Normalised Gain for this window is 0.596  
LPC coefficients for this window :- 114  
 1.0000  
 -1.5494  
 0.5740  
 0.0838  
 -0.0811  
 0.0570  
 0.0683  
 -0.0723  
 -0.0180  
 0.1389  
 -0.0321  
 -0.2344  
 -0.0186  
 0.2428  
 0.0945  
 -0.1661  
 -0.0640  
 0.1186  
 0.0611  
 -0.0205  
 -0.1041  
  
 Normalised Gain for this window is 0.60101  
LPC coefficients for this window :- 115  
 1.0000  
 -1.6305  
 0.7216  
 -0.0302  
 -0.1129  
 0.1450  
 0.1059  
 -0.0684  
 -0.0265  
 0.0715  
 -0.0802  
 -0.1836  
 0.0124  
 0.2404  
 0.1246  
 -0.1268  
 -0.1157  
 0.0557  
 0.0476  
 0.0228  
 -0.0741  
  
 Normalised Gain for this window is 0.62041  
LPC coefficients for this window :- 116  
 1.0000  
 -1.4616  
 0.4936  
 0.0535  
 -0.0356  
 0.0944  
 0.0225  
 -0.0796  
 0.0349  
 0.1337  
 -0.0436  
 -0.2216  
 -0.0459  
 0.2342  
 0.1204  
 -0.1066  
 -0.0826  
 0.0488  
 0.0739  
 0.0245  
 -0.0964  
  
 Normalised Gain for this window is 0.57414  
LPC coefficients for this window :- 117  
 1.0000  
 -1.7471  
 0.9040  
 -0.0973  
 -0.2041  
 0.2354  
 0.1691  
 -0.1526  
 -0.0460

0.1281  
 -0.0955  
 -0.2189  
 0.0620  
 0.2345  
 0.0607  
 -0.1047  
 -0.0511  
 0.0384  
 -0.0173  
 0.0199  
 -0.0216  
  
 Normalised Gain for this window is 0.58339  
LPC coefficients for this window :- 118  
 1.0000  
 -1.6456  
 0.6733  
 0.0189  
 -0.0554  
 0.1063  
 0.0430  
 -0.0486  
 0.0406  
 0.0928  
 -0.1152  
 -0.2357  
 0.0170  
 0.2628  
 0.1270  
 -0.1424  
 -0.1281  
 0.0671  
 0.0765  
 -0.0145  
 -0.0537  
  
 Normalised Gain for this window is 0.55902  
LPC coefficients for this window :- 119  
 1.0000  
 -2.6551  
 3.0374  
 -2.0118  
 0.5692  
 0.3639  
 -0.2090  
 -0.2443  
 0.3096  
 0.0357  
 -0.3103  
 -0.0383  
 0.2396  
 0.0665  
 -0.0847  
 -0.0635  
 0.0813  
 -0.0839  
 0.0274  
 0.0473  
 -0.0402  
  
 Normalised Gain for this window is 0.4688  
LPC coefficients for this window :- 120  
 1.0000  
 -1.9901  
 1.3414  
 -0.3462  
 -0.1760  
 0.2955  
 0.0725  
 -0.1638  
 0.0318  
 0.1428  
 -0.1727  
 -0.2184  
 0.1086  
 0.2178  
 0.0609  
 -0.1137  
 -0.0533  
 0.0255  
 -0.0264  
 0.0312  
 -0.0183  
  
 Normalised Gain for this window is 0.4662  
LPC coefficients for this window :- 121  
 1.0000  
 -2.1742  
 1.7091  
 -0.5325  
 -0.2304  
 0.3962  
 -0.0127  
 -0.1862  
 0.0897  
 0.1201  
 -0.1554  
 -0.2015  
 0.1031  
 0.2378  
 0.0111  
 -0.1680  
 0.0200  
 0.0628  
 -0.0948  
 0.0811  
 -0.0466  
  
 Normalised Gain for this window is 0.46903  
LPC coefficients for this window :- 122  
 1.0000  
 -2.1033  
 1.5304  
 -0.4784  
 -0.1884  
 0.4376  
 0.0149  
 -0.2370  
 0.1332  
 0.0367  
 -0.1892  
 -0.1473  
 0.0771  
 0.2706  
 0.0693  
 -0.1586  
 -0.0546  
 0.0287  
 -0.0711  
 0.0788  
 -0.0212  
  
 Normalised Gain for this window is 0.4667  
LPC coefficients for this window :- 123  
 1.0000  
 -2.0114  
 1.2535  
 -0.1753  
 -0.1788  
 0.1911  
 0.1150  
 -0.1526  
 -0.0023  
 0.1339  
 -0.1649  
 -0.1922  
 0.0880  
 0.2463  
 0.0884  
 -0.1738  
 -0.0878  
 0.0406  
 0.0311  
 0.0049  
 -0.0285  
  
 Normalised Gain for this window is 0.51302  
LPC coefficients for this window :- 124  
 1.0000  
 -2.4161  
 2.1241  
 -0.8013  
 -0.0814  
 0.3477  
 0.0005  
 -0.2226  
 0.0722  
 0.0992  
 -0.1453  
 -0.1392  
 0.0750  
 0.2957  
 0.0085  
 -0.3268  
 0.0932  
 0.1235  
 -0.1752  
 0.1262  
 -0.0464  
  
 Normalised Gain for this window is 0.48676  
LPC coefficients for this window :- 125  
 1.0000  
 -1.9506  
 1.1209  
 -0.1330  
 -0.1553  
 0.2155  
 0.0947  
 -0.1433  
 -0.0220  
 0.0741  
 -0.0933  
 -0.1801  
 0.0777  
 0.2670  
 0.0477  
 -0.2198  
 -0.0469

0.1015  
 -0.0258  
 -0.0173  
 0.0020  
  
 Normalised Gain for this window is 0.37663  
LPC coefficients for this window :- 126  
 1.0000  
 -2.9307  
 4.0598  
 -4.1551  
 3.5375  
 -2.3343  
 1.4571  
 -1.1400  
 0.9594  
 -0.6058  
 0.1926  
 -0.2272  
 0.2577  
 -0.0767  
 0.3053  
 -0.5149  
 0.3406  
 -0.2555  
 0.2328  
 -0.1084  
 0.0116  
  
 Normalised Gain for this window is 0.29586  
LPC coefficients for this window :- 127  
 1.0000  
 -1.9480  
 1.1398  
 -0.2307  
 -0.0047  
 0.2210  
 -0.0723  
 -0.1899  
 0.1108  
 0.1577  
 -0.1418  
 -0.1844  
 0.0355  
 0.2182  
 0.0926  
 -0.1867  
 -0.1278  
 0.1051  
 0.1185  
 -0.1122  
 0.0082  
  
 Normalised Gain for this window is 0.31735  
LPC coefficients for this window :- 128  
 1.0000  
 -2.1961  
 1.5524  
 -0.3813  
 0.1015  
 0.0582  
 -0.1400  
 -0.0793  
 0.1373  
 0.0458  
 -0.1207  
 0.0266  
 -0.0696  
 0.1286  
 0.0929  
 -0.2068  
 -0.0133  
 0.0246  
 0.2213  
 -0.2264  
 0.0508  
  
 Normalised Gain for this window is 0.26818  
LPC coefficients for this window :- 129  
 1.0000  
 -1.9351  
 1.0008  
 0.0096  
 0.0430  
 -0.0392  
 -0.0228  
 -0.1037  
 0.0874  
 0.1195  
 -0.1612  
 -0.0501  
 0.0231  
 0.1183  
 0.1003  
 -0.1756  
 -0.1445  
 0.1178  
 0.1497  
 -0.0761  
 -0.0518  
  
 Normalised Gain for this window is 0.18742  
LPC coefficients for this window :- 130  
 1.0000  
 -1.7651  
 0.7685  
 0.0003  
 0.0251  
 0.0155  
 0.1069  
 -0.0732  
 -0.0767  
 0.1618  
 -0.0992  
 -0.1973  
 0.0604  
 0.1562  
 0.0721  
 -0.0939  
 -0.0905  
 0.0390  
 0.0346  
 0.0084  
 -0.0420  
  
 Normalised Gain for this window is 0.16747  
LPC coefficients for this window :- 131  
 1.0000  
 -1.5903  
 0.5145  
 0.0789  
 -0.0058  
 0.0583  
 0.0401  
 -0.0244  
 0.0141  
 0.0584  
 -0.1071  
 -0.1472  
 0.0382  
 0.0999  
 0.0634  
 -0.0074  
 -0.0848  
 -0.0395  
 0.0441  
 0.0469  
 -0.0390  
  
 Normalised Gain for this window is 0.14784  
LPC coefficients for this window :- 132  
 1.0000  
 -1.6492  
 0.5492  
 0.1003  
 0.0339  
 0.0001  
 0.0052  
 -0.0085  
 0.0222  
 0.0872  
 -0.1114  
 -0.1887  
 0.0339  
 0.1733  
 0.0565  
 -0.0391  
 -0.0794  
 -0.0611  
 0.0911  
 0.0095  
 -0.0157  
  
 Normalised Gain for this window is 0.16181  
LPC coefficients for this window :- 133  
 1.0000  
 -1.4780  
 0.2786  
 0.1823  
 0.1145  
 -0.0322  
 -0.0144  
 -0.0250  
 0.0169  
 0.0075  
 -0.0537  
 -0.0126  
 -0.0272  
 -0.0252  
 0.0654  
 0.0456  
 -0.0128  
 0.0000  
 -0.0356  
 -0.0469  
 0.0656  
  
 Normalised Gain for this window is 0.15387  
LPC coefficients for this window :- 134  
 1.0000

-1.4830  
 0.2854  
 0.1094  
 0.0699  
 0.0929  
 0.0262  
 -0.0300  
 -0.0266  
 0.0074  
 -0.0279  
 -0.1071  
 -0.0297  
 0.0939  
 0.0889  
 0.0002  
 -0.0268  
 -0.0076  
 -0.0235  
 -0.0631  
 0.0607  
  
 Normalised Gain for this window is 0.14067  
LPC coefficients for this window :- 135  
 1.0000  
 -1.3072  
 0.1485  
 0.0976  
 0.0437  
 0.0280  
 0.0296  
 0.0121  
 -0.0122  
 -0.0110  
 -0.0125  
 -0.0214  
 -0.0233  
 0.0017  
 0.0313  
 0.0153  
 0.0098  
 0.0027  
 -0.0117  
 -0.0159  
 0.0081  
  
 Normalised Gain for this window is 0.14685  
LPC coefficients for this window :- 136  
 1.0000  
 -1.3768  
 0.1783  
 0.1155  
 0.0691  
 0.0570  
 -0.0085  
 -0.0138  
 0.0045  
 -0.0101  
 0.0261  
 -0.0374  
 -0.0534  
 0.0351  
 0.0330  
 0.0192  
 0.0072  
 -0.0217  
 -0.0263  
 -0.0673  
 0.0826  
  
 Normalised Gain for this window is 0.14135  
LPC coefficients for this window :- 137  
 1.0000  
 -1.1924  
 0.0835  
 0.0726  
 0.0392  
 -0.0037  
 0.0003  
 -0.0030  
 0.0189  
 0.0102  
 -0.0148  
 0.0127  
 0.0118  
 -0.0045  
 0.0140  
 -0.0066  
 -0.0219  
 0.0032  
 -0.0287  
 -0.0120  
 0.0417  
  
 Normalised Gain for this window is 0.10058  
LPC coefficients for this window :- 138  
 1.0000  
 -1.2262  
 0.0997  
 0.0605  
 0.0354  
 -0.0298  
 0.0267  
 0.0454  
 0.0228  
 0.0226  
 -0.0213  
 -0.0099  
 0.0030  
 0.0077  
 0.0248  
 -0.0068  
 0.0173  
 0.0152  
 -0.0506  
 -0.0371  
 0.0250  
  
 Normalised Gain for this window is 0.055551  
LPC coefficients for this window :- 139  
 1.0000  
 -1.6547  
 0.4874  
 0.1772  
 -0.0179  
 -0.0537  
 0.1241  
 0.0279  
 -0.0176  
 -0.0797  
 -0.0377  
 0.0867  
 -0.0017  
 -0.0073  
 -0.0519  
 0.0271  
 0.0839  
 -0.0746  
 -0.0058  
 0.0010  
 -0.0006  
  
 Normalised Gain for this window is 0.044813  
LPC coefficients for this window :- 140  
 1.0000  
 -1.2802  
 0.0902  
 0.0677  
 0.0344  
 0.0414  
 0.0354  
 0.0313  
 0.0270  
 0.0064  
 0.0140  
 -0.0023  
 -0.0240  
 -0.0242  
 -0.0165  
 0.0048  
 0.0023  
 0.0019  
 0.0139  
 -0.0061  
 -0.0058  
  
 Normalised Gain for this window is 0.064492  
LPC coefficients for this window :- 141  
 1.0000  
 -1.3895  
 0.1622  
 0.0902  
 0.0404  
 0.0347  
 0.0418  
 0.0299  
 0.0279  
 0.0215  
 0.0026  
 -0.0171  
 -0.0096  
 -0.0125  
 -0.0252  
 0.0117  
 0.0110  
 -0.0212  
 -0.0216  
 -0.0240  
 0.0537  
  
 Normalised Gain for this window is 0.077109  
LPC coefficients for this window :- 142  
 1.0000  
 -1.2248  
 0.0673  
 0.0637  
 0.0226  
 0.0100  
 0.0229  
 0.0135  
 0.0286

0.0278  
 0.0177  
 0.0219  
 -0.0131  
 -0.0231  
 -0.0072  
 -0.0047  
 -0.0054  
 -0.0137  
 0.0004  
 -0.0113  
 0.0179  
  
 Normalised Gain for this window is 0.058313  
LPC coefficients for this window :- 143  
 1.0000  
 -1.3768  
 0.1951  
 0.1208  
 0.0665  
 -0.0101  
 -0.0053  
 0.0384  
 0.0313  
 0.0084  
 0.0107  
 -0.0196  
 -0.0268  
 -0.0054  
 -0.0052  
 0.0217  
 -0.0158  
 -0.0123  
 0.0269  
 -0.0263  
 0.0019  
  
 Normalised Gain for this window is 0.02612  
LPC coefficients for this window :- 144  
 1.0000  
 -1.3965  
 0.2115  
 0.1127  
 0.1025  
 0.0412  
 0.0070  
 0.0039  
 -0.0324  
 0.0402  
 -0.0228  
 -0.0219  
 0.0188  
 -0.0281  
 0.0212  
 0.0281  
 -0.0161  
 -0.0124  
 0.0013  
 -0.0035  
 -0.0021  
  
 Normalised Gain for this window is 0.014673  
LPC coefficients for this window :- 145  
 1.0000  
 -1.3582  
 0.1910  
 0.0923  
 0.0614  
 0.0353  
 0.0026  
 0.0076  
 -0.0216  
 0.0002  
 0.0265  
 -0.0092  
 0.0092  
 0.0284  
 -0.0193  
 -0.0116  
 0.0196  
 0.0002  
 -0.0164  
 -0.0336  
 0.0129  
  
 Normalised Gain for this window is 0.021012  
LPC coefficients for this window :- 146  
 1.0000  
 -1.1475  
 0.0426  
 0.0083  
 0.0154  
 0.0439  
 0.0228  
 0.0126  
 0.0163  
 0.0085  
 0.0011  
 -0.0090  
 0.0019  
 0.0107  
 -0.0068  
 -0.0046  
 0.0066  
 -0.0032  
 -0.0041  
 -0.0194  
 0.0199  
  
 Normalised Gain for this window is 0.038426  
LPC coefficients for this window :- 147  
 1.0000  
 -1.0756  
 0.0149  
 0.0146  
 0.0126  
 0.0051  
 -0.0001  
 0.0106  
 0.0164  
 0.0010  
 0.0066  
 0.0052  
 -0.0063  
 0.0035  
 0.0065  
 0.0046  
 -0.0019  
 -0.0070  
 -0.0086  
 -0.0104  
 0.0269  
  
 Normalised Gain for this window is 0.074705  
LPC coefficients for this window :- 148  
 1.0000  
 -1.1968  
 0.0619  
 0.0364  
 0.0249  
 0.0276  
 0.0148  
 0.0049  
 0.0187  
 0.0115  
 -0.0131  
 -0.0189  
 0.0026  
 0.0167  
 -0.0050  
 0.0048  
 0.0139  
 -0.0107  
 -0.0042  
 -0.0037  
 0.0215  
  
 Normalised Gain for this window is 0.10929  
LPC coefficients for this window :- 149  
 1.0000  
 -1.0706  
 0.0150  
 0.0108  
 0.0132  
 0.0046  
 -0.0065  
 0.0016  
 0.0070  
 0.0007  
 0.0002  
 0.0018  
 0.0084  
 0.0057  
 -0.0010  
 -0.0003  
 -0.0035  
 -0.0056  
 0.0066  
 0.0100  
 0.0162  
  
 Normalised Gain for this window is 0.1045  
LPC coefficients for this window :- 150  
 1.0000  
 -1.2589  
 0.0981  
 0.1131  
 0.0424  
 -0.0295  
 -0.0119  
 0.0325  
 0.0331  
 0.0079  
 -0.0043  
 -0.0242  
 -0.0088  
 -0.0019  
 -0.0029  
 0.0061  
 -0.0221

-0.0227  
 0.0049  
 0.0522  
 0.0086  
  
 Normalised Gain for this window is 0.072032  
LPC coefficients for this window :- 151  
 1.0000  
 -1.3021  
 0.1640  
 0.0804  
 0.0228  
 0.0101  
 0.0294  
 0.0332  
 0.0144  
 0.0002  
 -0.0718  
 -0.0599  
 0.0369  
 0.0647  
 0.0243  
 -0.0416  
 -0.0504  
 -0.0241  
 0.0040  
 0.0356  
 0.0434  
  
 Normalised Gain for this window is 0.056445  
LPC coefficients for this window :- 152  
 1.0000  
 -1.2954  
 0.1567  
 0.0905  
 0.0477  
 0.0124  
 -0.0041  
 0.0092  
 0.0234  
 0.0202  
 -0.0184  
 -0.0218  
 -0.0344  
 -0.0202  
 0.0127  
 0.0050  
 -0.0326  
 -0.0280  
 0.0202  
 0.0124  
 0.0589  
  
 Normalised Gain for this window is 0.046575  
LPC coefficients for this window :- 153  
 1.0000  
 -1.3478  
 0.2179  
 0.0891  
 0.0541  
 0.0350  
 0.0361  
 0.0207  
 0.0024  
 -0.0306  
 -0.0485  
 -0.0495  
 0.0058  
 0.0339  
 -0.0041  
 -0.0114  
 -0.0313  
 -0.0186  
 0.0450  
 0.0036  
 0.0139  
  
 Normalised Gain for this window is 0.028634  
LPC coefficients for this window :- 154  
 1.0000  
 -1.6928  
 0.6238  
 0.1865  
 -0.0043  
 -0.0654  
 0.0684  
 0.0959  
 -0.0862  
 -0.0979  
 -0.0398  
 0.0069  
 0.0015  
 0.0547  
 0.1174  
 -0.0713  
 -0.1266  
 0.0131  
 0.0581  
 -0.0359  
 0.0072  
  
 Normalised Gain for this window is 0.017167  
LPC coefficients for this window :- 155  
 1.0000  
 -1.7733  
 0.7405  
 0.1637  
 -0.0306  
 -0.0451  
 0.0823  
 0.0245  
 -0.0811  
 -0.0313  
 -0.0941  
 -0.0078  
 0.0960  
 0.0302  
 0.0398  
 -0.0780  
 -0.0689  
 0.0814  
 0.0242  
 -0.1366  
 0.0764  
  
 Normalised Gain for this window is 0.0167  
LPC coefficients for this window :- 156  
 1.0000  
 -1.7081  
 0.6760  
 0.1467  
 0.0277  
 -0.0510  
 0.0416  
 0.0248  
 -0.0134  
 -0.1186  
 -0.0571  
 0.0877  
 0.0054  
 -0.0125  
 0.0577  
 -0.0306  
 -0.0595  
 0.0232  
 0.0288  
 -0.0869  
 0.0382  
  
 Normalised Gain for this window is 0.013515  
LPC coefficients for this window :- 157  
 1.0000  
 -1.8102  
 0.8083  
 0.0823  
 0.0811  
 -0.0710  
 -0.0019  
 0.0387  
 -0.0294  
 -0.1063  
 0.0107  
 -0.0074  
 0.0505  
 0.0978  
 -0.0992  
 -0.0607  
 0.0591  
 0.0500  
 -0.0605  
 -0.0891  
 0.0895  
  
 Normalised Gain for this window is 0.011626  
LPC coefficients for this window :- 158  
 1.0000  
 -1.3275  
 0.1226  
 0.0947  
 0.0820  
 0.0712  
 0.0542  
 -0.0007  
 -0.0356  
 -0.0617  
 -0.0443  
 -0.0122  
 -0.0065  
 0.0340  
 0.0271  
 -0.0106  
 0.0222  
 -0.0049  
 -0.0293  
 -0.0347  
 0.0692  
  
 Normalised Gain for this window is 0.056759  
LPC coefficients for this window :- 159  
 1.0000

-1.1652  
 0.0560  
 0.0557  
 0.0301  
 0.0242  
 0.0178  
 -0.0084  
 -0.0194  
 -0.0222  
 -0.0119  
 0.0001  
 0.0110  
 0.0148  
 -0.0031  
 -0.0145  
 -0.0103  
 0.0066  
 0.0139  
 -0.0010  
 0.0381  
  
 Normalised Gain for this window is 0.099132  
LPC coefficients for this window :- 160  
 1.0000  
 -1.0969  
 0.0328  
 0.0296  
 0.0149  
 0.0133  
 -0.0023  
 -0.0067  
 0.0036  
 -0.0008  
 0.0007  
 -0.0205  
 -0.0012  
 0.0142  
 -0.0141  
 -0.0092  
 -0.0072  
 0.0042  
 0.0188  
 0.0153  
 0.0249  
  
 Normalised Gain for this window is 0.086515  
LPC coefficients for this window :- 161  
 1.0000  
 -1.1409  
 0.0425  
 0.0368  
 0.0272  
 0.0296  
 0.0164  
 -0.0090  
 -0.0015  
 0.0009  
 0.0072  
 0.0090  
 -0.0160  
 -0.0132  
 -0.0026  
 -0.0096  
 -0.0120  
 -0.0053  
 0.0007  
 -0.0110  
 0.0634  
  
 Normalised Gain for this window is 0.067823  
LPC coefficients for this window :- 162  
 1.0000  
 -1.1185  
 0.0327  
 0.0377  
 0.0305  
 0.0215  
 0.0168  
 -0.0145  
 -0.0027  
 0.0046  
 -0.0082  
 -0.0014  
 -0.0098  
 -0.0065  
 0.0029  
 -0.0079  
 -0.0091  
 -0.0212  
 -0.0121  
 -0.0003  
 0.0805  
  
 Normalised Gain for this window is 0.075353  
LPC coefficients for this window :- 163  
 1.0000  
 -1.2810  
 0.1489  
 0.0707  
 0.0473  
 0.0228  
 0.0061  
 -0.0017  
 0.0172  
 -0.0155  
 -0.0268  
 0.0167  
 0.0084  
 -0.0280  
 -0.0301  
 0.0018  
 -0.0063  
 0.0200  
 0.0023  
 -0.0236  
 0.0622  
  
 Normalised Gain for this window is 0.050266  
LPC coefficients for this window :- 164  
 1.0000  
 -1.2234  
 0.0718  
 0.0623  
 0.0446  
 0.0204  
 0.0129  
 0.0014  
 -0.0096  
 0.0070  
 0.0009  
 -0.0040  
 0.0089  
 0.0176  
 0.0088  
 -0.0314  
 -0.0316  
 0.0002  
 0.0224  
 0.0320  
 -0.0007  
  
 Normalised Gain for this window is 0.080671  
LPC coefficients for this window :- 165  
 1.0000  
 -1.3604  
 0.1843  
 0.1054  
 0.0503  
 0.0544  
 -0.0108  
 -0.0607  
 -0.0326  
 -0.0066  
 0.0272  
 0.0395  
 0.0247  
 -0.0012  
 0.0003  
 -0.0066  
 -0.0212  
 -0.0151  
 -0.0028  
 0.0624  
 -0.0221  
  
 Normalised Gain for this window is 0.10454  
LPC coefficients for this window :- 166  
 1.0000  
 -1.1371  
 0.0580  
 0.0537  
 0.0366  
 -0.0078  
 -0.0165  
 -0.0156  
 -0.0135  
 0.0041  
 0.0024  
 0.0086  
 0.0119  
 0.0019  
 -0.0083  
 -0.0089  
 0.0017  
 0.0128  
 0.0161  
 0.0276  
 -0.0091  
  
 Normalised Gain for this window is 0.083562  
LPC coefficients for this window :- 167  
 1.0000  
 -1.0688  
 0.0251  
 0.0261  
 0.0207  
 0.0092  
 -0.0041  
 -0.0062  
 -0.0081

-0.0120  
 -0.0038  
 -0.0023  
 0.0012  
 0.0011  
 -0.0072  
 -0.0037  
 -0.0047  
 0.0015  
 0.0148  
 0.0209  
 0.0283  
  
 Normalised Gain for this window is 0.12534  
LPC coefficients for this window :- 168  
 1.0000  
 -1.0959  
 0.0288  
 0.0279  
 0.0140  
 0.0131  
 0.0055  
 -0.0045  
 -0.0040  
 -0.0090  
 -0.0071  
 -0.0013  
 -0.0026  
 0.0028  
 0.0004  
 -0.0107  
 0.0026  
 0.0090  
 0.0107  
 0.0191  
 0.0223  
  
 Normalised Gain for this window is 0.17079  
LPC coefficients for this window :- 169  
 1.0000  
 -1.0504  
 0.0082  
 0.0113  
 0.0039  
 0.0077  
 0.0112  
 -0.0021  
 -0.0041  
 -0.0089  
 -0.0116  
 -0.0046  
 -0.0060  
 0.0003  
 0.0091  
 0.0073  
 0.0049  
 0.0046  
 0.0088  
 -0.0003  
 0.0333  
  
 Normalised Gain for this window is 0.16474  
LPC coefficients for this window :- 170  
 1.0000  
 -1.0735  
 0.0209  
 0.0082  
 0.0061  
 0.0095  
 0.0131  
 0.0025  
 0.0014  
 0.0045  
 -0.0119  
 -0.0047  
 -0.0070  
 -0.0015  
 0.0119  
 -0.0042  
 -0.0011  
 0.0013  
 -0.0005  
 -0.0051  
 0.0528  
  
 Normalised Gain for this window is 0.12787  
LPC coefficients for this window :- 171  
 1.0000  
 -1.4452  
 0.2824  
 0.1759  
 0.0108  
 -0.0452  
 0.0515  
 -0.0332  
 -0.0260  
 0.0274  
 -0.0290  
 0.0035  
 -0.0160  
 0.0257  
 0.0282  
 -0.0174  
 0.0125  
 -0.0050  
 -0.0120  
 -0.0279  
 0.0509  
  
 Normalised Gain for this window is 0.070318  
LPC coefficients for this window :- 172  
 1.0000  
 -1.2878  
 0.1626  
 0.1038  
 0.0710  
 -0.0124  
 0.0108  
 0.0201  
 -0.0295  
 0.0073  
 -0.0485  
 -0.0245  
 0.0383  
 0.0065  
 0.0080  
 0.0037  
 -0.0330  
 0.0192  
 0.0075  
 -0.0838  
 0.0885  
  
 Normalised Gain for this window is 0.021375  
LPC coefficients for this window :- 173  
 1.0000  
 -2.1035  
 1.5370  
 -0.5607  
 0.4757  
 -0.6419  
 0.5226  
 -0.2684  
 0.0409  
 0.1454  
 -0.2819  
 0.2115  
 -0.0468  
 -0.0894  
 0.2630  
 -0.3363  
 0.1082  
 0.0589  
 -0.1029  
 0.0772  
 0.0062  
  
 Normalised Gain for this window is 0.01156  
LPC coefficients for this window :- 174  
 1.0000  
 -1.7352  
 0.8107  
 -0.0039  
 0.0421  
 -0.1173  
 0.0832  
 -0.0671  
 -0.0394  
 0.1060  
 -0.0790  
 0.1535  
 -0.1078  
 -0.0694  
 0.1249  
 -0.1117  
 0.0132  
 -0.0513  
 -0.0427  
 0.2063  
 -0.0855  
  
 Normalised Gain for this window is 0.0096725  
LPC coefficients for this window :- 175  
 1.0000  
 -1.5548  
 0.5396  
 0.1034  
 0.0197  
 -0.0721  
 -0.0087  
 -0.0131  
 -0.0147  
 0.0091  
 0.0311  
 0.0508  
 -0.0534  
 0.0041  
 -0.0303  
 -0.0359  
 -0.0061

-0.0169  
 0.0492  
 -0.0086  
 0.0287  
  
 Normalised Gain for this window is 0.010746  
LPC coefficients for this window :- 176  
 1.0000  
 -1.5510  
 0.4768  
 0.0859  
 0.1094  
 -0.0992  
 -0.0671  
 0.0345  
 0.0025  
 0.0087  
 -0.0190  
 -0.0064  
 0.0565  
 -0.0351  
 -0.0362  
 0.0148  
 -0.0080  
 -0.0016  
 -0.0187  
 0.0314  
 0.0314  
  
 Normalised Gain for this window is 0.031016  
LPC coefficients for this window :- 177  
 1.0000  
 -1.2248  
 0.1315  
 0.0719  
 0.0176  
 -0.0107  
 0.0063  
 -0.0010  
 -0.0272  
 0.0069  
 0.0176  
 -0.0171  
 0.0439  
 0.0017  
 -0.0413  
 -0.0055  
 -0.0319  
 0.0246  
 -0.0089  
 -0.0188  
 0.0784  
  
 Normalised Gain for this window is 0.044693  
LPC coefficients for this window :- 178  
 1.0000  
 -1.2960  
 0.1769  
 0.0819  
 0.1039  
 -0.0018  
 -0.0360  
 -0.0025  
 0.0049  
 -0.0126  
 -0.0477  
 0.0196  
 -0.0326  
 -0.0262  
 0.0191  
 -0.0129  
 0.0088  
 -0.0084  
 0.0129  
 0.0008  
 0.0635  
  
 Normalised Gain for this window is 0.043929  
LPC coefficients for this window :- 179  
 1.0000  
 -1.2756  
 0.1976  
 0.0592  
 0.0697  
 0.0040  
 -0.0286  
 -0.0238  
 0.0147  
 0.0332  
 -0.0300  
 -0.0260  
 -0.0532  
 -0.0290  
 0.0259  
 0.0101  
 -0.0171  
 -0.0144  
 0.0259  
 0.0274  
 0.0476  
  
 Normalised Gain for this window is 0.041425  
LPC coefficients for this window :- 180  
 1.0000  
 -1.2027  
 0.1192  
 0.0752  
 0.0242  
 -0.0252  
 -0.0137  
 0.0288  
 0.0089  
 -0.0208  
 -0.0357  
 -0.0017  
 0.0175  
 -0.0059  
 0.0163  
 0.0149  
 -0.0229  
 -0.0177  
 0.0084  
 -0.0116  
 0.0601  
  
 Normalised Gain for this window is 0.039745  
LPC coefficients for this window :- 181  
 1.0000  
 -1.2902  
 0.2056  
 0.0808  
 0.0063  
 -0.0211  
 -0.0158  
 0.0225  
 0.0418  
 0.0066  
 -0.0367  
 -0.0691  
 0.0562  
 0.0427  
 -0.0495  
 -0.0108  
 -0.0151  
 0.0081  
 0.0021  
 -0.0363  
 0.0856  
  
 Normalised Gain for this window is 0.028773  
LPC coefficients for this window :- 182  
 1.0000  
 -1.1231  
 0.1102  
 0.0047  
 0.0073  
 0.0097  
 -0.0006  
 0.0399  
 0.0102  
 -0.0078  
 -0.0305  
 -0.0824  
 0.0054  
 0.0373  
 0.0237  
 -0.0049  
 -0.0447  
 0.0290  
 0.0128  
 -0.0076  
 0.0351  
  
 Normalised Gain for this window is 0.017858  
LPC coefficients for this window :- 183  
 1.0000  
 -1.2617  
 0.2147  
 0.0246  
 0.0614  
 -0.0082  
 -0.0150  
 -0.0150  
 -0.0042  
 0.0218  
 -0.0620  
 -0.0297  
 0.0685  
 0.0179  
 -0.0231  
 0.0118  
 0.0020  
 0.0028  
 0.0525  
 -0.0254  
 -0.0175  
  
 Normalised Gain for this window is 0.018409  
LPC coefficients for this window :- 184  
 1.0000

-1.3476  
 0.2666  
 0.0346  
 0.0244  
 0.0477  
 0.0248  
 -0.0293  
 0.0360  
 0.0180  
 -0.0931  
 -0.0209  
 0.0611  
 -0.0054  
 -0.0056  
 0.0045  
 0.0320  
 -0.0321  
 -0.0637  
 0.0224  
 0.0443  
  
 Normalised Gain for this window is 0.018367  
LPC coefficients for this window :- 185  
 1.0000  
 -1.4379  
 0.3399  
 0.0225  
 0.0845  
 0.0922  
 -0.0528  
 -0.0223  
 0.1097  
 -0.0056  
 -0.2114  
 -0.0362  
 0.1736  
 0.0240  
 -0.0726  
 -0.0103  
 0.0510  
 -0.0350  
 -0.0768  
 0.0953  
 -0.0129  
  
 Normalised Gain for this window is 0.017632  
LPC coefficients for this window :- 186  
 1.0000  
 -1.5521  
 0.5017  
 0.0224  
 0.1041  
 0.0528  
 -0.0440  
 -0.0739  
 0.1459  
 -0.0231  
 -0.2205  
 -0.0256  
 0.0770  
 0.1247  
 -0.0220  
 -0.0272  
 0.0292  
 -0.1259  
 -0.0146  
 0.1641  
 -0.0704  
  
 Normalised Gain for this window is 0.014033  
LPC coefficients for this window :- 187  
 1.0000  
 -1.8336  
 1.1379  
 -0.4211  
 0.2609  
 -0.0329  
 -0.0947  
 0.0445  
 0.0813  
 -0.0597  
 -0.0788  
 -0.0647  
 0.0335  
 0.1287  
 -0.0214  
 -0.0973  
 0.0904  
 -0.1153  
 -0.0184  
 0.2555  
 -0.1756  
  
 Normalised Gain for this window is 0.0089377  
LPC coefficients for this window :- 188  
 1.0000  
 -1.3701  
 0.3556  
 0.0032  
 0.0748  
 0.0925  
 -0.0547  
 -0.0900  
 0.0702  
 0.0293  
 -0.0389  
 -0.0330  
 -0.0604  
 0.0170  
 0.0175  
 0.0077  
 0.0647  
 -0.0773  
 -0.0341  
 0.1506  
 -0.0851  
  
 Normalised Gain for this window is 0.0072841  
LPC coefficients for this window :- 189  
 1.0000  
 -2.2374  
 2.0844  
 -1.4090  
 1.1426  
 -0.9979  
 0.8980  
 -1.0334  
 1.1663  
 -0.9322  
 0.4696  
 -0.2877  
 0.2472  
 -0.0305  
 -0.3018  
 0.4759  
 -0.3151  
 0.1568  
 -0.2557  
 0.2711  
 -0.0907  
  
 Normalised Gain for this window is 0.0070977  
LPC coefficients for this window :- 190  
 1.0000  
 -1.9564  
 1.2955  
 -0.3973  
 0.3044  
 -0.4280  
 0.4403  
 -0.4141  
 0.4773  
 -0.4111  
 0.0912  
 0.0529  
 0.0084  
 0.0944  
 -0.4434  
 0.5173  
 -0.1940  
 0.0133  
 -0.1182  
 0.0786  
 0.0347  
  
 Normalised Gain for this window is 0.0071378  
LPC coefficients for this window :- 191  
 1.0000  
 -1.9138  
 1.2739  
 -0.4521  
 0.2587  
 -0.3939  
 0.6789  
 -0.6298  
 0.3969  
 -0.3183  
 0.2604  
 -0.1342  
 -0.0530  
 0.2429  
 -0.4301  
 0.3587  
 -0.1612  
 0.0813  
 -0.0649  
 -0.0353  
 0.0818  
  
 Normalised Gain for this window is 0.008802  
LPC coefficients for this window :- 192  
 1.0000  
 -1.7872  
 0.9486  
 -0.0533  
 -0.0012  
 -0.2056  
 0.3058  
 -0.1923  
 0.0278

-0.0743  
 0.1763  
 -0.0612  
 -0.1292  
 0.1588  
 -0.1250  
 0.0205  
 -0.0781  
 0.1445  
 -0.1283  
 0.0301  
 0.0608  
  
 Normalised Gain for this window is 0.0086447  
LPC coefficients for this window :- 193  
 1.0000  
 -1.8916  
 1.0825  
 -0.0855  
 0.1947  
 -0.5757  
 0.3811  
 0.0932  
 -0.1968  
 -0.0139  
 0.0834  
 0.0304  
 -0.1149  
 0.0256  
 0.0889  
 -0.0574  
 -0.1438  
 0.1290  
 -0.0271  
 0.0262  
 -0.0072  
  
 Normalised Gain for this window is 0.006943  
LPC coefficients for this window :- 194  
 1.0000  
 -1.8942  
 1.0372  
 -0.1015  
 0.2225  
 -0.4234  
 0.2880  
 -0.0911  
 -0.0795  
 0.1939  
 -0.1307  
 0.0139  
 -0.1345  
 0.1733  
 0.1143  
 -0.2233  
 -0.0210  
 0.0938  
 -0.0541  
 0.0027  
 0.0363  
  
 Normalised Gain for this window is 0.00763  
LPC coefficients for this window :- 195  
 1.0000  
 -1.8369  
 0.9556  
 -0.1450  
 0.2581  
 -0.3159  
 0.2854  
 -0.2038  
 -0.1082  
 0.2928  
 -0.1627  
 -0.0398  
 0.0725  
 -0.0588  
 0.0885  
 -0.0218  
 -0.0199  
 -0.0339  
 -0.0899  
 0.0951  
 0.0196  
  
 Normalised Gain for this window is 0.0070279  
LPC coefficients for this window :- 196  
 1.0000  
 -1.5690  
 0.5712  
 -0.0267  
 0.1697  
 -0.0289  
 -0.0181  
 -0.0730  
 -0.0292  
 0.0661  
 -0.0092  
 -0.0058  
 -0.0184  
 0.0220  
 -0.0044  
 -0.0386  
 0.0821  
 -0.0252  
 -0.1077  
 -0.0292  
 0.1114  
  
 Normalised Gain for this window is 0.0067048  
LPC coefficients for this window :- 197  
 1.0000  
 -1.7980  
 1.0591  
 -0.3810  
 0.2945  
 -0.0497  
 -0.1186  
 -0.0142  
 -0.0190  
 0.1559  
 -0.0206  
 -0.1509  
 0.0295  
 0.0906  
 -0.0555  
 -0.0398  
 0.1042  
 -0.0547  
 -0.0325  
 -0.0747  
 0.1078  
  
 Normalised Gain for this window is 0.0067766  
LPC coefficients for this window :- 198  
 1.0000  
 -1.4837  
 0.4769  
 0.0351  
 0.1077  
 -0.0592  
 -0.0351  
 -0.0541  
 0.0090  
 0.1204  
 -0.0212  
 -0.0963  
 0.0048  
 0.0651  
 -0.0972  
 0.0298  
 0.0866  
 -0.0417  
 0.0103  
 -0.1090  
 0.0918  
  
 Normalised Gain for this window is 0.0084833  
LPC coefficients for this window :- 199  
 1.0000  
 -1.6675  
 0.6706  
 0.0968  
 0.0076  
 -0.0610  
 -0.0468  
 -0.1132  
 0.1506  
 0.1083  
 -0.1024  
 -0.0634  
 -0.0137  
 0.0344  
 0.0202  
 -0.0030  
 0.0039  
 -0.0222  
 0.0756  
 -0.0622  
 0.0195  
  
 Normalised Gain for this window is 0.012717

0.9950  
 -1.6219  
 0.7478  
 -0.1667  
 0.1836  
 -0.1578  
 0.1318  
 -0.1102  
 0.0671  
 -0.0113  
 -0.0212  
 -0.0345  
 0.0149  
 0.0241  
 0.0122  
 -0.0122  
 -0.0096  
 -0.0114  
 0.0081  
 -0.0045  
 0.0168

0.0707  
 0.3610  
 0.6295  
 0.4881  
 0.4038  
 0.3958  
 0.3351  
 0.3118  
 0.2877  
 0.2434  
 0.2165  
 0.2225  
 0.2097  
 0.2022  
 0.1845  
 0.1805  
 0.1397  
 0.1454  
 0.1220  
 0.1198  
 0.0772

**OUTPUT MEAN AND STANDARD DEVIATION CURVES** **:**

