[IP,cs,ns,op]=RSCencoder2(K,k,n,gen\_func);

rng('default');

msg=randi([0,1],1,interleaver\_size-(K-1));

%encoder 1

[codeword1, code1,code\_parity1,padding1]=ConvoCodeGenerator2(msg,cs,ns,op,IP,gen\_func);

systematic=codeword1(:,1)';

%encoder2

%a. interleave

interleaved\_msg=systematic(yy);

%interleaved\_msg(end-(K)+1:end)=[];

[codeword2, code2,code\_parity2,padding2] =ConvoCodeGenerator2(interleaved\_msg,cs,ns,op,IP,gen\_func);

if length(code\_parity2)>interleaver\_size

code\_parity2(interleaver\_size+1:end)=[];

elseif length(code\_parity2)<interleaver\_size code\_parity2(end+1:interleaver\_size)=zeros(1,interleaver\_size-length(code\_parity2));

end

code=[systematic;code\_parity1;code\_parity2];

fin\_code=code(:)';