NAME:Tapan Vhatkar

CLASS:B.E(EnTC)

ROLL NO:L-80

SUB:CDC

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TITLE: LZ-77

clc;

clear all;

close all;

str='cabracadabrarrarrad';

strl=length(str);

code={'a','000';'b','001';'c','010';'d','011';'r','100'}

sbl=7;

labl=6;

i=1;

pos=[];

while i+sbl<strl

sb=str(i:i+sbl-1);

if i+sbl+labl-1<strl

lab=str(i+sbl:i+sbl+labl-1);

else

lab=str(i+sbl:end);

end

sp=lab(1);

pos=[];

for j=1:sbl

if sp~=sb(j)

offset=0;

ml=0;

%send code

else

pos=[pos j];

end

end

Ml=[];

for k=1:length(pos)

count=0;

m=1;

flag=0;

for l=pos(k):sbl+labl

while m<labl

if lab(m)==str(i+l-1)

count=count+1;

break;

else

flag=1;

break;

end

end

m=m+1;

if flag==1

break;

end

end

Ml=[Ml count];

end

if length(pos)==0

c=str(i+ml+sbl);

i=i+1;

else

ml=max(Ml);

c=str(i+ml+sbl);

i=i+ml+1;

end

if length(Ml)~=0

n=2;

for m=1:length(Ml)-1

if Ml(n)<Ml(m)

n=m;

else

n=n;

end

end

offset=sbl-pos(n)+1;

end

for m=1:5

if strcmp(c,code(m,1))==1

p=m;

end

end

output={offset ml code{p,2}};

disp(output);

end

OUTPUT:

code =

'a' '000'

'b' '001'

'c' '010'

'd' '011'

'r' '100'

Encoder output=

[0] [0] '011'

[7] [4] '100'

[3] [5] '011'