```
DP=10;
prompt = 'How many pairs in sample? ';
sampsize = input(prompt)

prompt ='Area of left tail in confidence interval? (e.g. 0.975)';
ptest= input(prompt)

degf=sampsize-1;
zscore = norminv( 0.975,0,1);
stepper=0.01*sampsize^0.5;
toprange=1000;
noncentpar=zscore*sampsize^.5;


nctdist=[-4:stepper:toprange];
boxes=length(nctdist);

qdist=nctdist/sampsize^.5;

distpdf =zeros(1,boxes);

distpdf = nctpdf(nctdist,degf, noncentpar);

cump= nctcdf(nctdist,degf, noncentpar);

boxes=length(qdist);
format long

sampsize;
interval=qdist(boxes)-qdist(boxes-1);

s=1;
while cump(s)<ptest
s=s+1;
 end
interpq= qdist(s-1)+ ( ptest-cump(s-1)) / (cump(s)-cump(s-1))*( qdist(s)-
qdist(s-1));
for preciz=3:1:DP
stepper= (sampsize^0.5)* (qdist(s)-qdist(s-1))/10;
toprange=qdist(s) *sampsize^0.5;
botrange=qdist(s-1) *sampsize^0.5;
nctdist=[botrange:stepper:toprange];
boxes=length(nctdist);
qdist=nctdist/sampsize^.5;

distpdf =zeros(1,boxes);

distpdf = nctpdf(nctdist,degf, noncentpar);

cump= nctcdf(nctdist,degf, noncentpar);

boxes=length(qdist);
s=1;
while cump(s)<ptest
```

```
s=s+1;
 end

end
interpq= qdist(s-1)+ ( ptest-cump(s-1)) / (cump(s)-cump(s-1))*( qdist(s)-
qdist(s-1));



disp(' Z is 1.96.')
disp(' sample size is '),  disp(sampsize)
disp(' gamma is '),  disp(ptest)
disp(' Coefficient for BA confidence limits for LOAs considered individually
is ')
disp(interpq)
```