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READY.

```
5 INPUT"ENTER DIGIT BUFFER LENGTH";LN
6 IF LN=0 THEN LN=10
10 LL=3
20 INPUT"enter an integer (1-255)";ch
30 dim n(ln),r(ll,ln),j(ll)
70 for cn=1 to ln
80 n(cn)=0
90 for cl=1 to ll
100 r(cl,cn)=0
110 next cl
120 next cn
125 print"n & r are cleared"
130 n(1)=1
135 print"for f=1 to";ch
140 for f=1 to ch
142 j(3)=int(f/100)
144 j(2)=int((f-100*j(3))/10)
146 j(1)=f-100*j(3)-10*j(2)
147 print j(3);j(2);j(1)
150 for kl=1 to ll
160 ca=0
165 print "for kn=1 to":ln-kl+1
170 for kn=1 to ln-kl+1
180 pd=j(kl)*n(kn)+ca
190 ca=int(pd/10)
195 print "r(";kl;",";kn+kl-1;)"=";pd-10*ca
200 r(kl,kn+kl-1)=pd-10*ca
210 next kn
220 next kl
230 for cn=1 to ln
240 n(cn)=0
250 next cn
260 n(1)=r(1,1):h=r(1,2)+r(2,2):print"n(1)=";n(1)
270 ca=int(h/10)
280 n(2)=h-ca*10
290 for y=3 to ln
300 sm=r(1,y)+r(2,y)+r(3,y)+ca
310 ca=int(sm/10)
320 n(y)=sm-10*ca:print "y";y;"n(y)";n(y)
330 next y
340 next f
350 p=ln
360 print p,n(p):if n(p)=0 then p=p-1:goto 360
365 input "data filename";n$
370 open 2,8,2,n$+",s,w"
375 t$="the factorial of"+str$(ch)+" contains"+str$(p)+" digits."
376 print t$:print#2,t$
377 print"start";:print#2,"start";
380 for q=p to 1 step -1
390 print#2,right$(str$(n(q)),1);
510 print n(q);
520 next q
530 print" end!":print#2," end!"
```

540 close 2  
550 end

ready.