

sorts

1) LSD sort is stably sorted, right most digit (LSD) to left

initial no is ¹th ti fo al go pe to co to ²th ai of ³th pa
Sort d=1 pa pe of ¹th ²th ³th ti ai ai no fo ^{go to co to} is
sort d=0 [ai ai co fo go is no of pa pe] th th th ti to to]

while pe was in front of pa before, in
sort d=1 pa was in front of pe.
So it is stable based on last iteration.

2) MSD sort is not reverse LSD sort, but starts at first then combs out

initial no is th ti fo al go pe to co to th ai of th pa
sort MSD al ai co fo go is no of pe pa th ti to to th th

as this is done stably, it doesn't accurately complete on first step.
therefore, we sort the next digit for those which conflict.

[ai al] co fo go is no of (pa pe) th th th ti to to

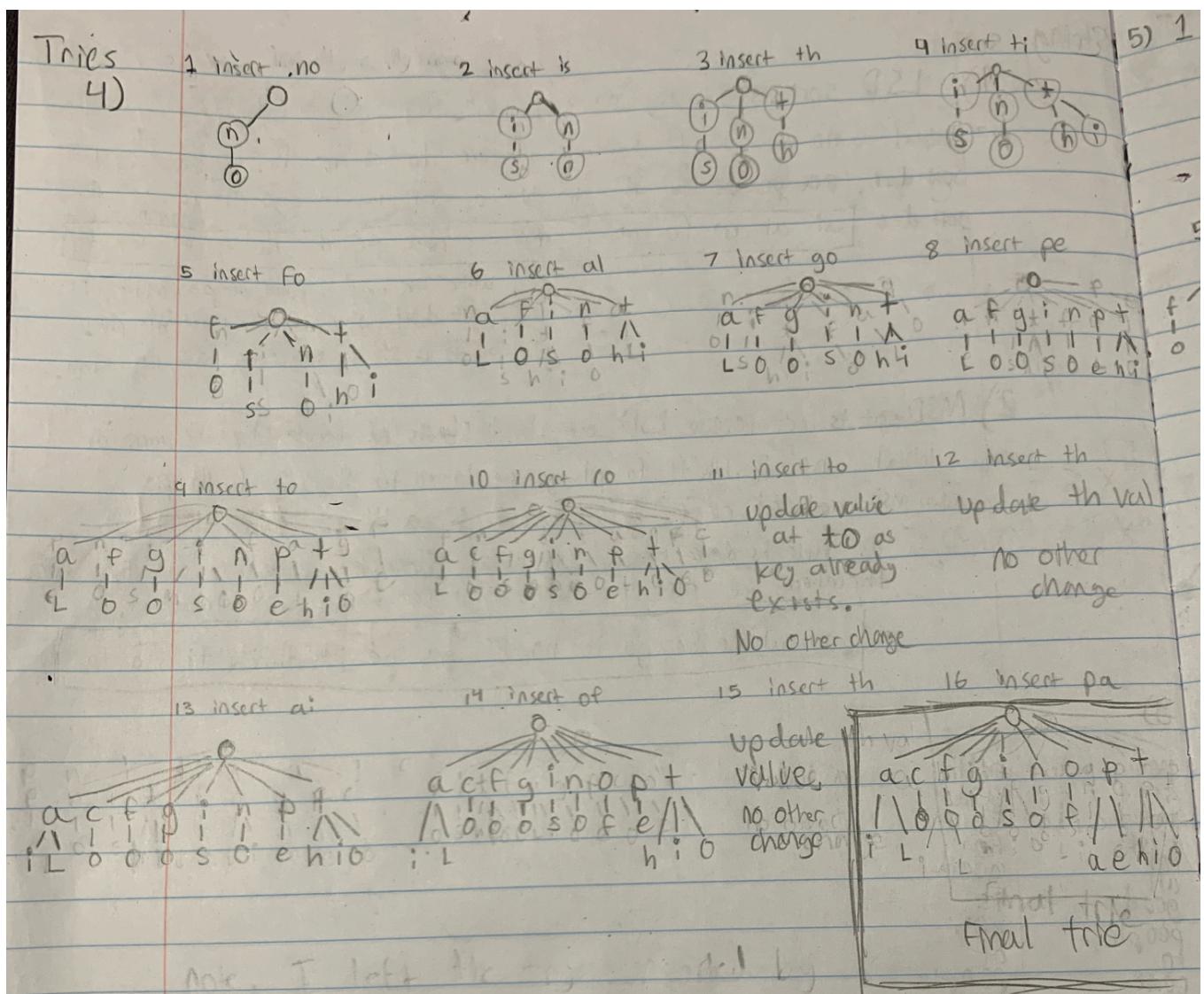
String sorts

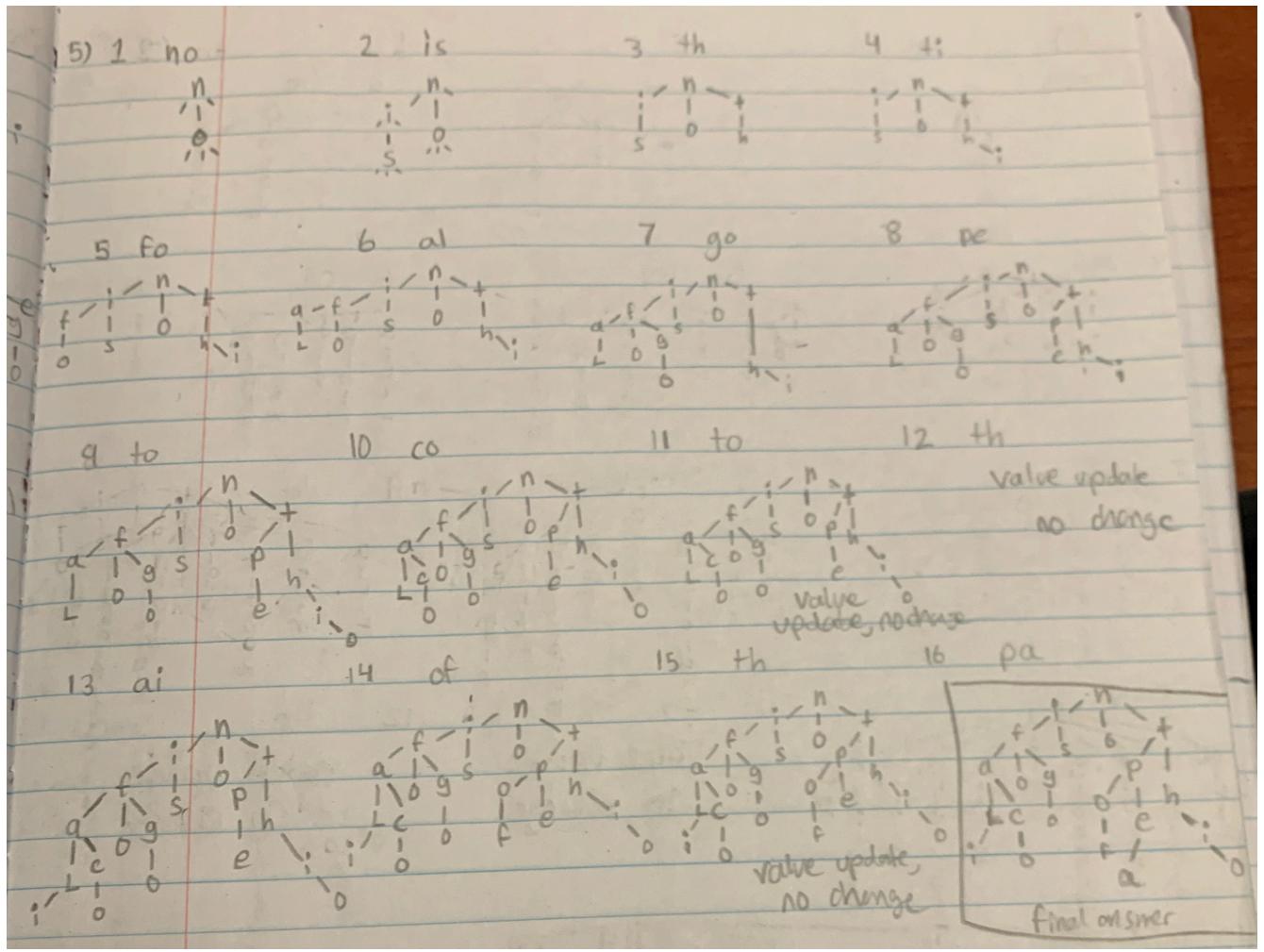
3)

(initial)	(MSD)	(second digit)	(further digits result in no change)
now	all	aid	
is	aid	all	
the	come	come	
time	for	for	
for	good	good	
all	is	is	
good	now	now	
people	of	of	
to	people	people	
come	the	the	
to	time	the	
the	to	time	
aid	to	to	
of	the	to	

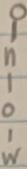
Final answer:

aid
 all
 come
 for
 good
 is
 now
 of
 people
 the
 the
 time
 to
 to

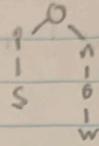




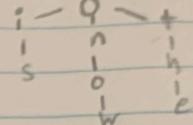
6)
1 now



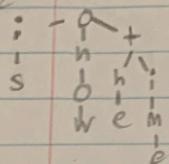
2 is



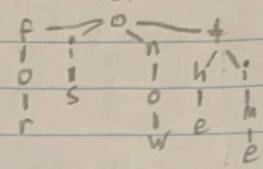
3 the



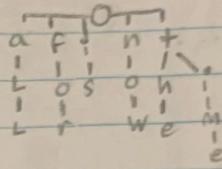
4 time



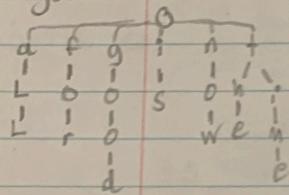
5 for



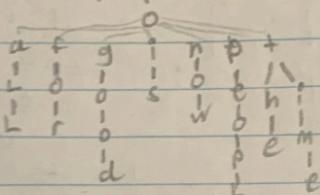
6 all



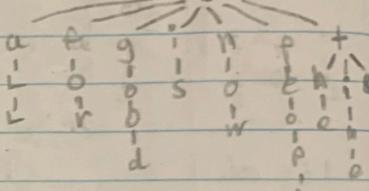
7 good



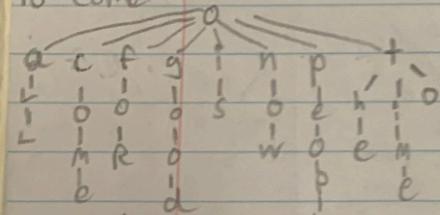
8 people



q to



10 come



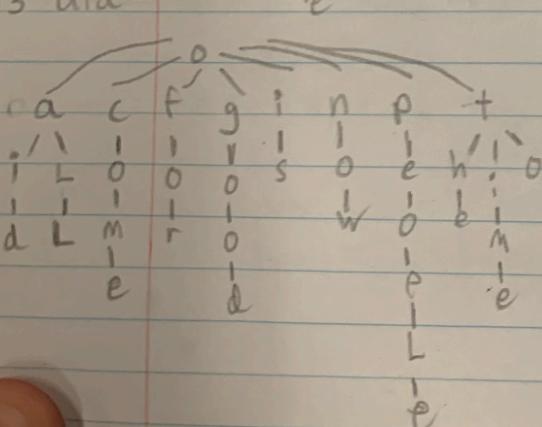
11 10

Value update
No change

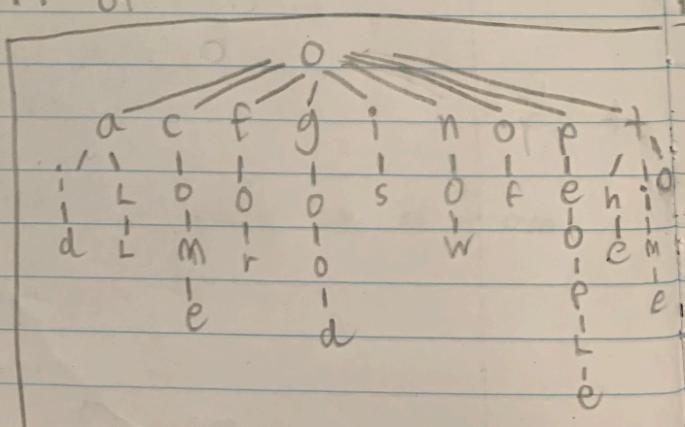
12 the

Value update,
No change

13 and



111 of 14 of



final answer

7)

1 now

n
o
w

2 is

i n
s o
w

3 the

i n
s o
w e

4 time

i n t
s o h
w b h
e e

5 for

f i n +
o s w h
r b m

6 all

a f i n +
l o s w h
r b m

7 good

a f i n +
l o g s o h
r b w e m
d e e

8 people

a f i n +
l o g s o p h
r o w e m
d e e

9 to

a f i n +
l o y s o p h
r b w e m
d e e

10 come

a f i n +
l c o g s o p h
r o w e m
d e d

11 to

value update

no change

12 the

value update

no change

13 aid

a f i n +
l c o g s o p h
r o w e m
d e d

14 of

final
cls

a f i n +
l c o g s o p h
r b r o f o e m
d h e d