

Prüfer Codes

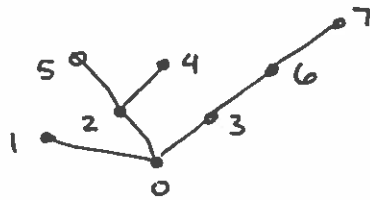
From code to tree:

Prüfer Code:

0 2 2 0 6 3

↳ Edge set: $\frac{1}{0} \frac{4}{2} \frac{5}{2} \frac{2}{0} \frac{7}{6} \frac{6}{3} \frac{3}{0}$

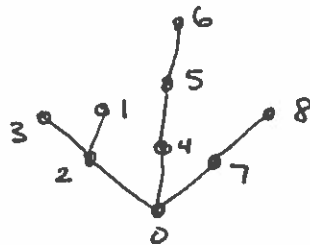
↳ Tree:



Prüfer Code: 2 2 0 5 4 0 7

↳ Edge set: $\frac{1}{2} \frac{3}{2} \frac{2}{0} \frac{6}{5} \frac{5}{4} \frac{4}{0} \frac{8}{7} \frac{7}{0}$

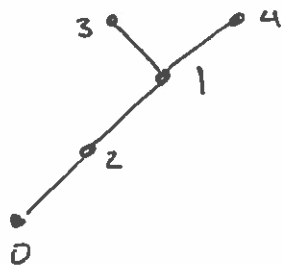
↳ Tree



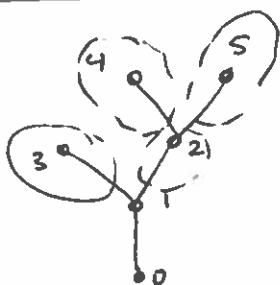
Prüfer code : 1 1 2

↳ Edge set: $\frac{3}{1} \frac{4}{1} \frac{1}{2} \frac{2}{0}$

↳ Tree:



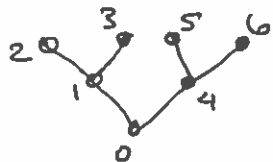
Tree :



↳ Edge set: $\frac{3}{1} \frac{4}{2} \frac{5}{2} \frac{2}{1} \frac{1}{0}$

↳ Prüfer code: 1 2 2 1

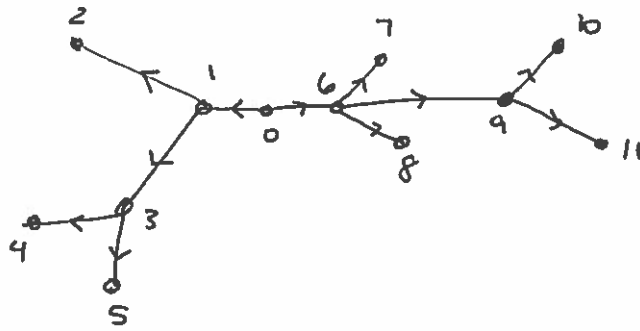
Tree :



Edge set: $\frac{2}{1} \frac{3}{1} \frac{1}{0} \frac{5}{4} \frac{6}{4} \frac{4}{0}$

Prüfer code: 1 1 0 4 4

Tree:



Edge set:

2 4 5 3 1 7 8 10 11 9 6
1 3 3 1 0 6 6 9 9 6 0

Prüfer code: 1 3 3 1 0 6 6 9 9 6

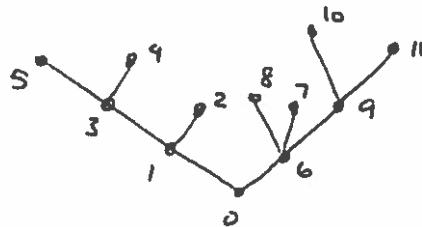
Turn back into tree:

$n-2 = 10$

$n-1 = 11$

labels $\{1, 2, 3, 4, \dots, 11\}$
on to p

2 4 5 3 1 7 8 10 11 9 6
1 3 3 1 0 6 6 9 9 6 0



~~Edge Set:~~

Prüfer Code: 5 5 4 0 0 1 7

Edge set: $\frac{2}{5}$ $\frac{3}{5}$ $\frac{5}{4}$ $\frac{4}{0}$ $\frac{6}{0}$ $\frac{8}{1}$ $\frac{1}{7}$ $\frac{7}{0}$

Tree:

