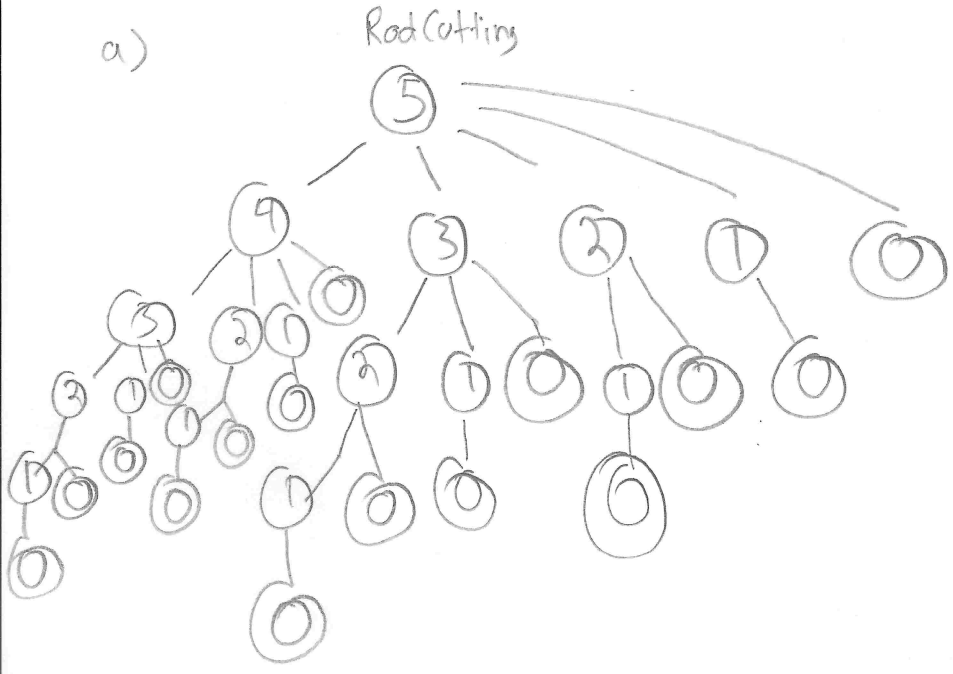
a)



b)

length i	1	2	3	4	5
price pi	1	42	69	84	90
pi/i	1	21	23	16	18

density

If the rod length(i) is 5, then, according to the greedy algorithm, you cut into a rod of length 4 and a rod of length 1; yielding, a price of $85, where as a higher total of $111 can be obtained if it is chosen to cut the rod into lengths of 2 and 3; this is the optimal-better solution.

c)

d) Coded