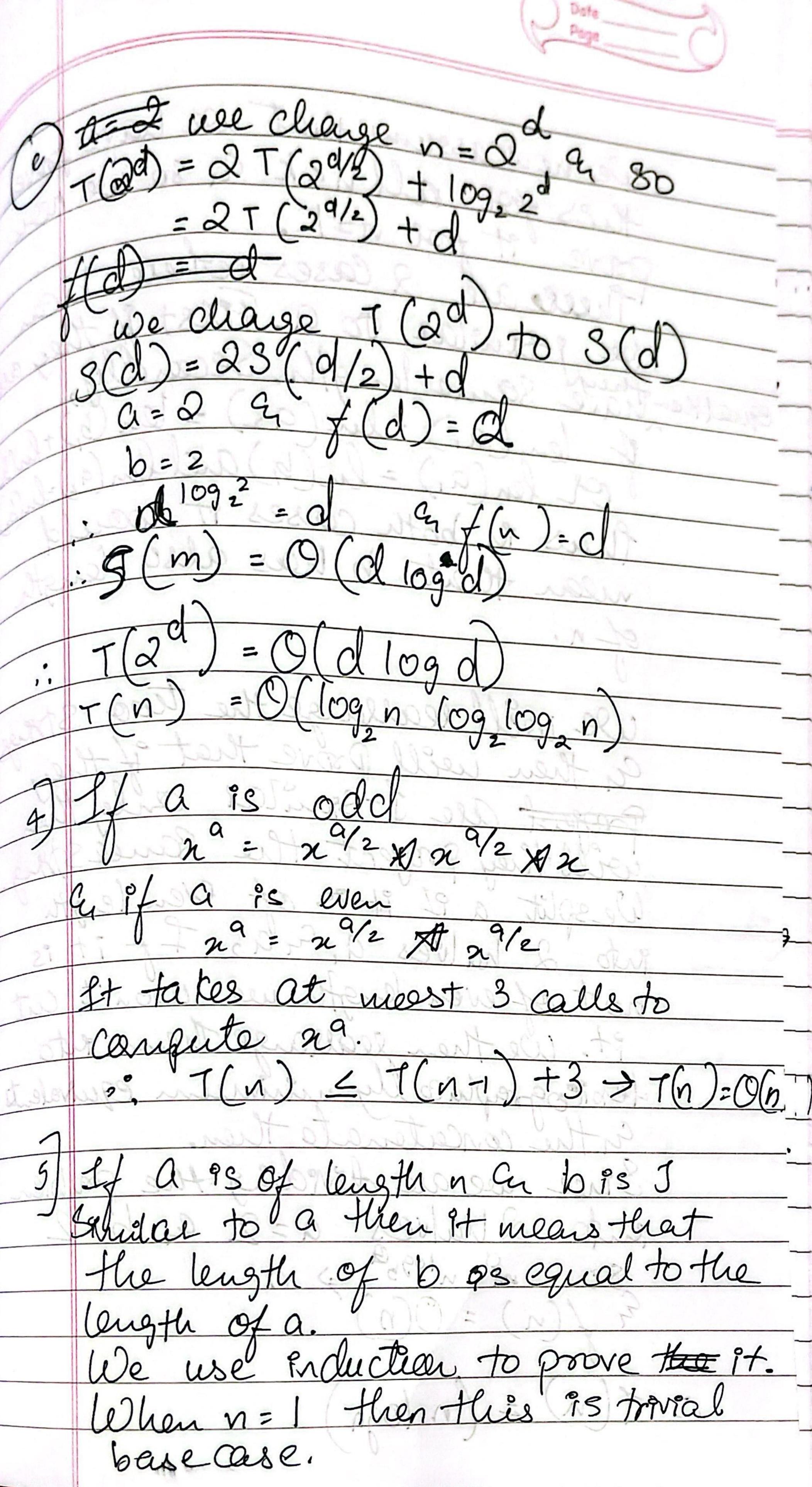
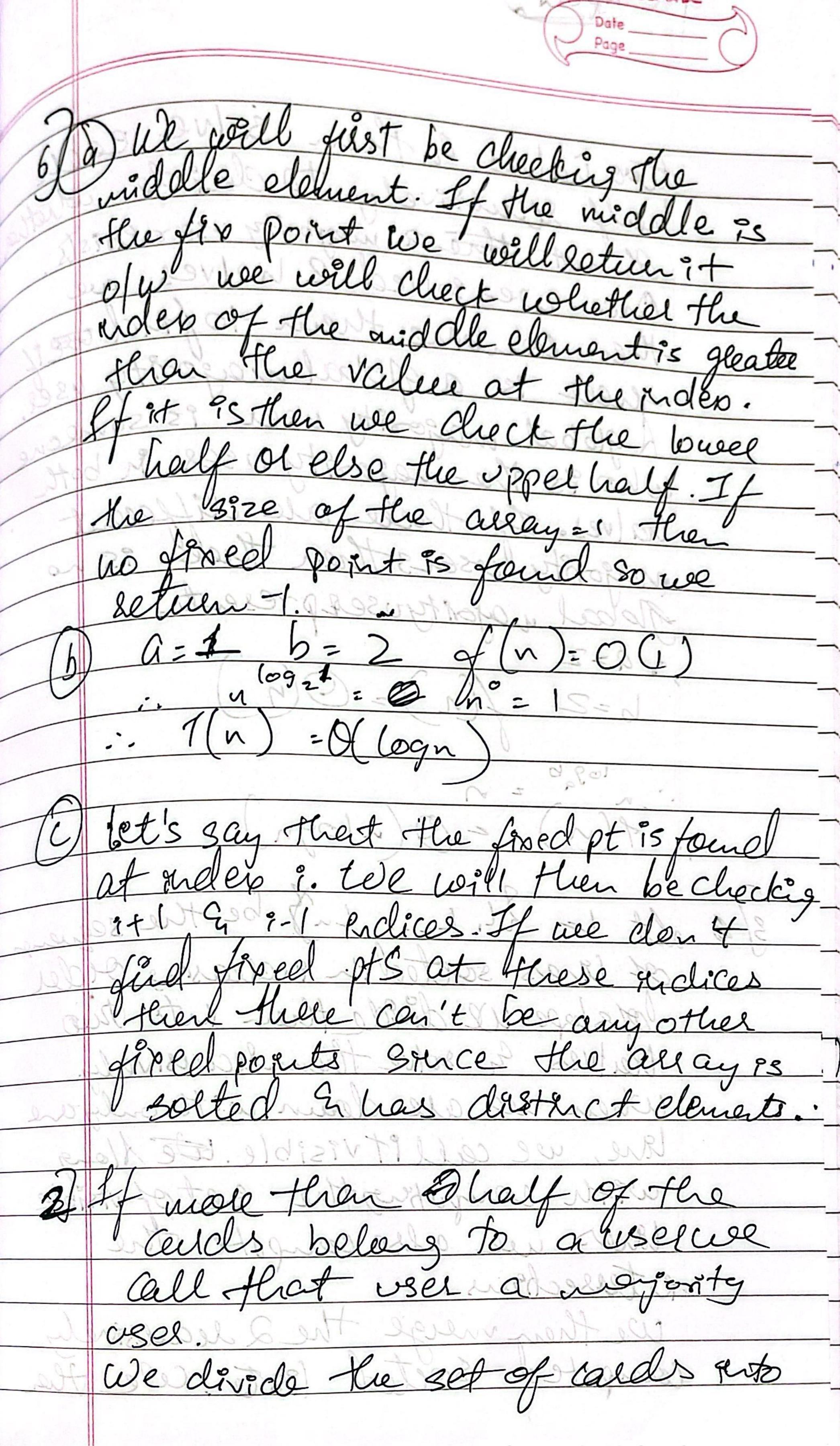
Honework 5 80 by applying ((n) = a(I) a(I) tog (n) = a(I) => 0 (n 2 log n) (b) f(n) = nlogn a = 8 a b = 8 10969 = nlogs $f(n) = n \log n = O(n^{\frac{1098}{6}}$ 6000

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we now assume that we have proven tol all nek au so we new a cases cerhere gesenilae do a. Frest Je same length. Second for len(ai) = lin(b) and lin(a)-lu(b) Phus re both cases et would mean that b has also length We will reallage the two strage a then well prove that of they project ale J-Spirilai only their will they project the Samee Stry. We split a ef it is of even leight into 2 halves a, Evan & f it is not of even length we won't cut it. We then leallange them ento Jesicographically minimum equivalents. 9 the concertenate then. 34 rue une divoling + 2 haves a=2 2 n1095



two halves in them 30/ve each two half recuesively to decide who who was a majority use & exists he served 2 halves Once we solved 2 halves are then combrie them to frid they self there is a global mayority user is someone A global mayority user is someone who is the magoraty user in both halves. If three are different majority osees then theel is no global ungentyvserpresent. b=2 /(n)=0(n) -0(n/09n) 3/8 det le 21, L. Luy be the sequence of lines sorted in rucleasing Order ofsløpe- We divide then into theo lle ves & solve themsecusively When well all down withouty are lane, we call it visible. Let Mong with computers the set of visible the we also compute the

