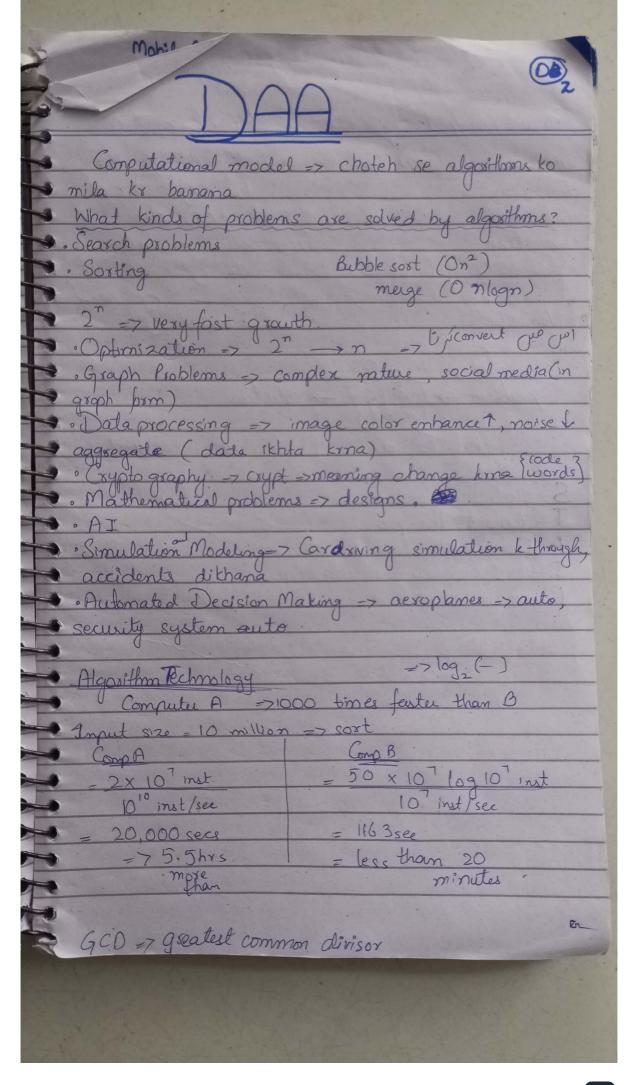
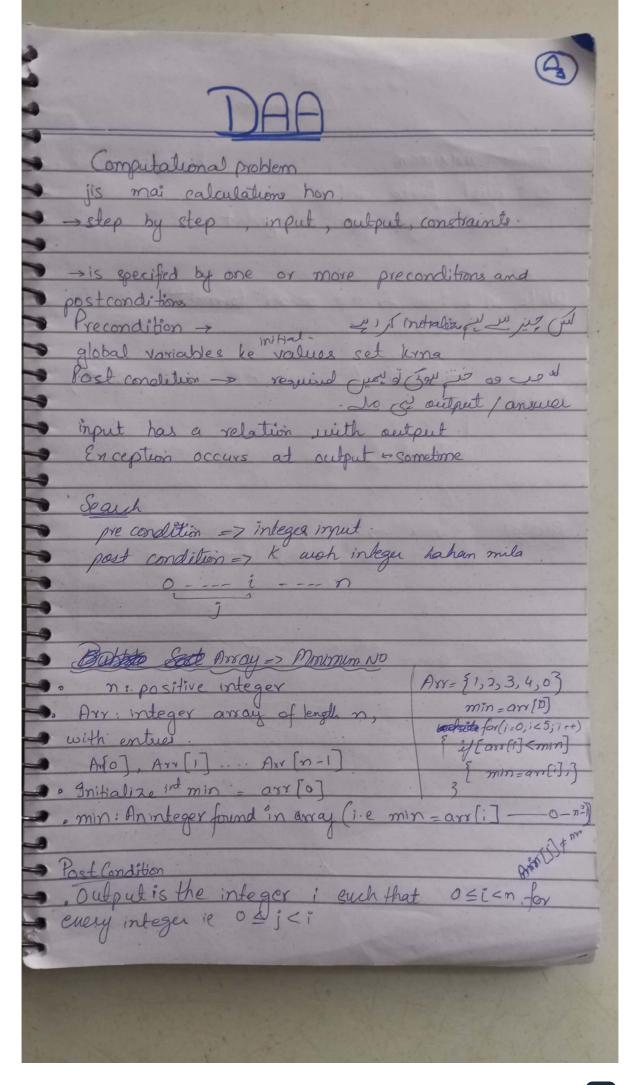


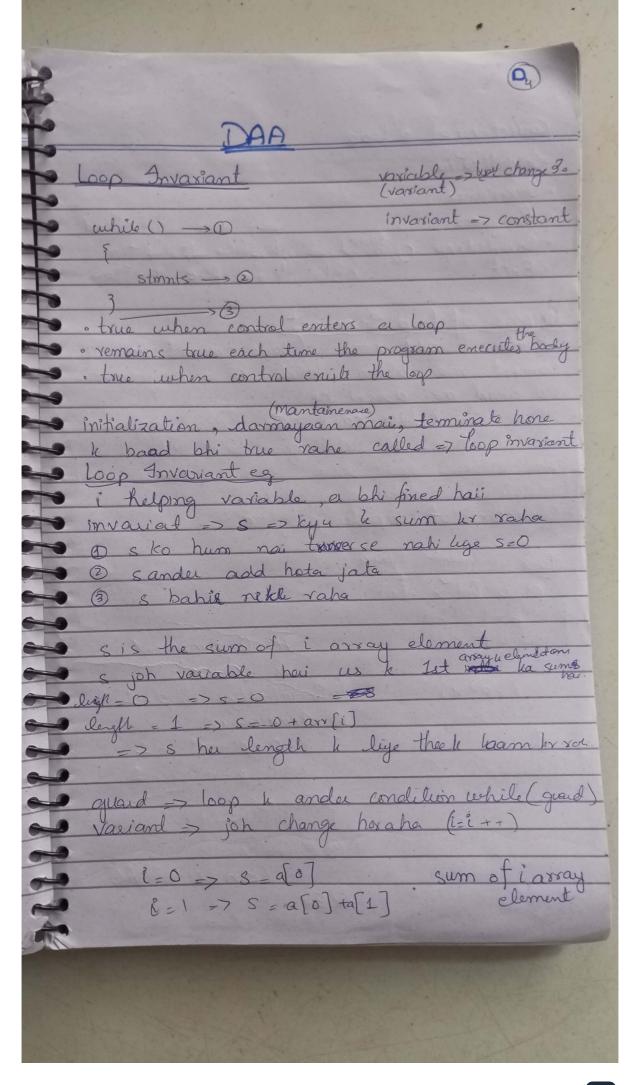
Real numbers -> Mantissa and Exponent Data type is a set of values that defines on them by some /certain no of operations SF-32168, _. 0,-327683) a = 32768. I de coil y de algorithm No study algorithm xuctural approach problem solving · optimization والا سمتهم عام ريا ليل الريم اس ك plu popumize algoritmons à lu T da Bineary search Pairect access for large data, bimary search fail Carreer opportunities dech kr new barate, progress hater · Understanding complexity -> O(n) Loop, Recursion Giscomplex but imp to understand this



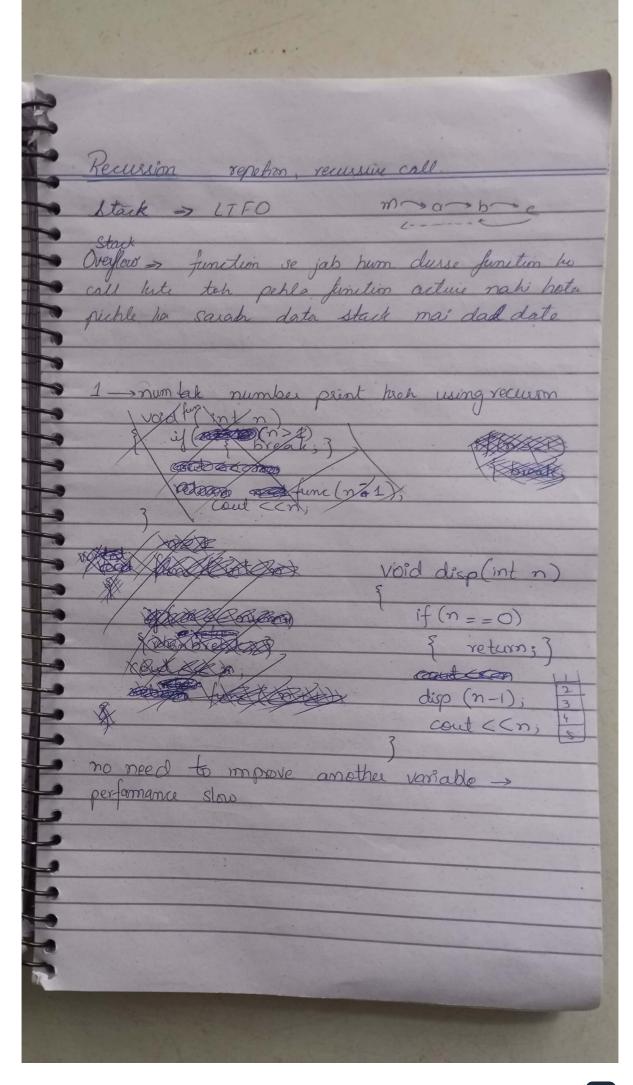
	-
Represention of algorithm is multiple	-4
Proportios:-	4
Input, Output . & output, of sub is of input	-
· Precision Esters 3 22 sequence e define precisely à steps	9
· Tiniteness (is) girl i get	-
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· Correctness subject court & statement	
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An Art and a Science	-
problem -> thinking -> solution {mind3	0
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this is art & algorithm is art and scon	age of
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I - implementation of algorithm R - Refinement Si Livi l, charge (1)	-
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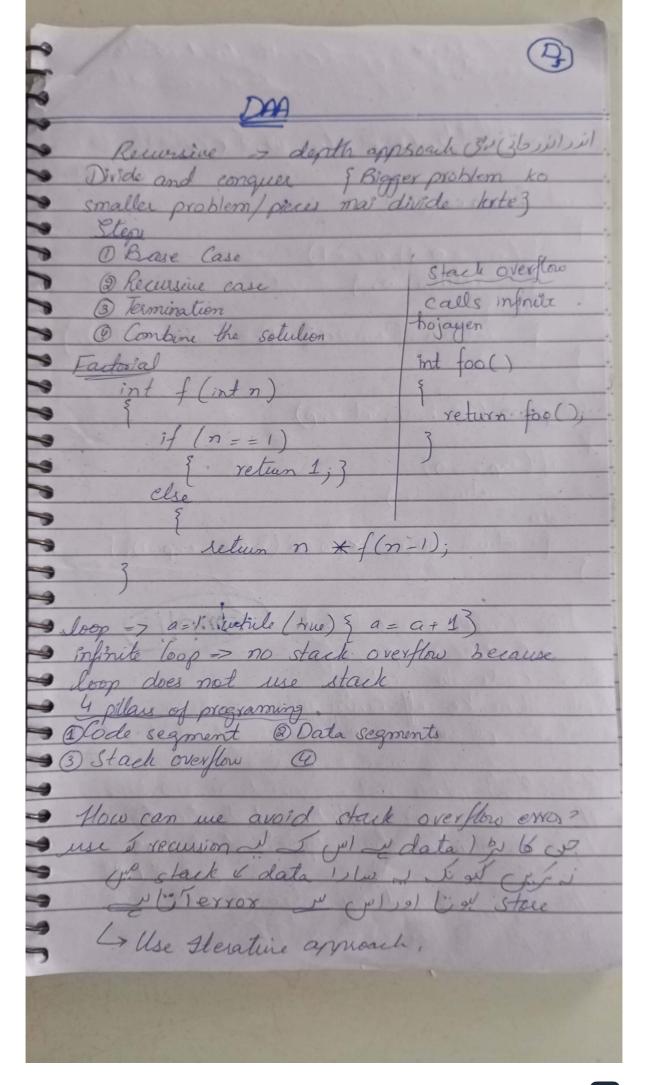


if not value found in search Les output Le Exception. Finding maximum soutput us situation so by Total



Correctness of a loop · Initialization · Invariance bound, 37 pb spalse 12 2 4t Purpose of loop Invariant (loop invariant · Correctness of computer program Fin glescres the god





limit for o on so on so on so limit & depth setur multiple ((1) of stop 09 5 () make sure int fibonacci (int n) return fibonacci (n-1) + fibonnaci int power (int base, int enp) Algorithm ke efficiency measure The time required by algorithm to solve given problem is called TC

int add (int o, int b) 1 return 0+15; -> only 2 statement T(n) = 0(1) 34 instructions \$0(4) constants hain un ko drop urden , situai bhi constant int main () constant na rakhu only i

 $n = 2^{k}$ find word, $\log_2 n = k \log_2 2$ 200 power of for (i = 0; i < n; i++) 65×8-823 (variables hain => variate 0-1 =>(nm) (2 Fre) (2 hues) fin iteration nxm Squaremation donoh loops on tak challe > 4 4x4=16 - 42 2 -> 1 n2 for(i=1; l2=n; i++) for (j=0, j < 1, j++) cout CC x" c (endl 3 Rule => variable same, higher order => heep