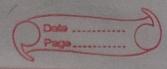
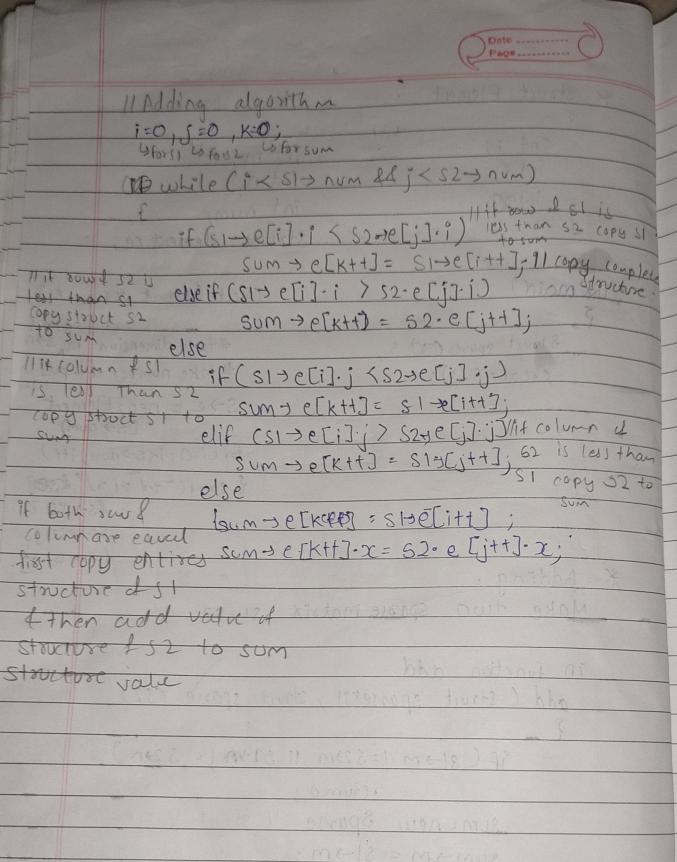
Date

Sparse Matrix > very few non-zero element in Matrix no of non-zero element (000din ate 15st totald num of non-zero element column row Total total column compressed sparse row (30°10 & memory is reduced) · 3 - element] > Row of element IA[0,1,5; - - - -JA [5,8,2 - - - 7 + column of element Addition & sparse matrix 0 0 4 6 0 0 0 0 00 00 0 0 1-10-01 2 > column 0 4 mateton Un attent 2 5 10



| X | stouct Element * Struct sparse |
|----|---|
| | 1 |
| | int i; int m; |
| | inti; intn; |
| | intake; int num; |
| | 3 Struct element re; |
| | |
| 92 | (recité (struct spareze *) |
| , | |
| | Storet spares coods; #take dimension in 5+n |
| | ereate (ls); # take number of input in |
| | Ste = new Element |
| | Est num) |
| | for Cizo; ixs > num; itt) |
| | Escoufe" to d to |
| | ls-er:7: |
| 75 | 4 5-e Ci). 27 |
| | Rading. |
| | Make two sparse matrix s1,52 |
| | in function add |
| | add (struct spanse*s1, struct spanse *s2) |
| | 7 |
| | "IF (81 > m 1= 52 > m 11 52 + m 1 = 52 > n) "Idimension" |
| | returno. |
| | sum= new sparse 11 struct sparse in heap |
| | sum > m = SI > m; ligiving structure |
| | SUM -> n = 5/7 n lidimensions |
| | sum->e=new Flement[8] >num+s2>num] |
| | |
| | |



Friend Function is global (no need of scope resolution operator sparce operator + (spane (s); iostocam - for input ostream > for output istocam should format > istocam & operator ? Cistocam lis, Sparse (s) ostream & operator << (ostream los, sparse ls) s cin>>ctass name contre contité dass name Sparse Sparse: 20 perator + (sparse &s) XXX polynomial Representation. p(x) = 305 +2x2 +5x2 +2x+7 3 252 7 struct poly Struct Ferm ? int coeff; int Exp; Struct Term * t; i) poi input >> number of otements.

(in polydata type variable)

variable n of poly) ii) Assign heap memory to t as array

