& Ch. Sushina A15-6 AP19110010345 (i) # include Cstdioih) #include / conio.h> void main (), P \* 1 - 1 - M closer(); int A[10], n,i, L=0, u=9, f=0, M; Printer 10 elements of an array in ascending order: \n'?). for (i=0, izlo; itt) Scanf Ca %d; + +[i] Print f ("Enkrelements to be searched In an arrays"), Scarf (20617, frum); while (LCU) [ ] ME (LEV)/2 if (mum > A [M]) L=M+11

chse: if (num > A[M]) 1 = M+1; else
if (nx A [M]) U= M-1; 11 13321 = elsel PLI break; R ANALY COLORS OF THE PARTY if (F=0) print f (4 = 0) prints ("% present in array", n, MI);
getch (); (b) # include 3tdio.z. · void main ()?

with A [10], N, 1, L=0, U=7, f=0, M, Sume, Pull print f (" Enter 10 elements of an array in Ascending orders (n");

for (i=0, iz; itt) scanf ("%d", f x[i]); prints (Enter to elemon Scarched!) Scanf ("Ed, En); while (1 40) of FF (PCA[M]) M= (40)/2 U= M-1; if (n>A[M]) L= M+1; if (nc A [M]) break; V= M-1; the 8 break; g while (LZ=0){ M= (L+0)/2 ef ( +>A[M]) Lz M+1;

# include Cstdion> Widmain () ? int A[5], B[5], C[10]; int i, j, k, temps prints (" Enter 5 clonents of Ist arrays") for (1=0,125,ift) Scanf ( of of ta [i]) prints (ci Enter 5 element of and array) , for (1=0; 125, 1++) Scanf (ookd) + B[i]; for (1=0;12(4; i++); 9 for (j=i+1) j < 5;j++) } if (ACI)>ACI) p temp = A[i]; ACIJE ACJJ 1 [j]= temp;

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if (B[i]>B[j]){
 temp = B [i];
  B[i]= B[j];
   B[]]= temp; 53
for (i=0; j=0; k=0, 1210, iff)
 if [A[j] <=B[K]) {
   C[i]=A[j];
    C[i]=B[k];
 if (j=5|| k==5)[
    break g 33
  $05, (EC5), 8
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[1]=B[K]; Ktt; 8 array using merge Sort , ), (i=0; i < 10; Ht) print (18d rc[])

Insertion sort is a simple sorting algorithm that 3) Insertion Bort builds that fabricates sorted & itemat an time. This is less efficient on large list than more advanced algorithms such as Quick sort, ext- Input clements 189 178 120 Step-1 / 89 17 8 12 0 [ Bold elements are sorted list & non-bold Unsorte step-2 :- 17 89 8 12 0 Each element will be removed from Down li El placed at right position in Sorted List Step-3:- 817 89 120 Step-4:-8 12 17 89 0 Step-5:- 0 8 12 17 69

Selection sort iselection sort is a simple sorting algorithm. This algorithm is an in-place Comparison based algorithm in which the list is divitled into a parts, the sorted part at Left & Unsorted part at right end. Ext. Array: [10, 5, 2, 1] The 1st element = 10. In next, we must find Smallest number for the remaining array. The Smallest number = 1, so, we raplace 10 by 1 The new array = [1, 5, 2, 10] Again process repeales Finally & sorted array = L1, 2,5,10

Stindlude 28tdiosn's

Void binary\_search (int[], int, int)

Void boubble\_Sort (int[], int;

Int main() &

Int key, size,;

Int list [25];

Armte Caenker size of Listi Scanf Cuebd", fsize) printf ("Enter elements") for (izo; 1 Lsize; 1++){ Scanf (16/1, flist[i]); ] hubble\_sort (list, si ze'); prints (aln"); printf ("Enter key to search"); Scanf (IF/4) pkey); binary - search Cust, 0; 972, key); void bubble-sort (int hist[], mt-fize) 2 int temp, 1, j; for (1=0; 12 steg 1++){ for (j=0, jlsix;j++)8 if (List [i] > List [ji] )s temp z list (i); list [i]= list [j]; list [j]=tenpj 833

Void binary-10 Cint List [1, Kellen inthy) inf mudy \* (lu>h) p print faky fun tetum; mid = (lothi) if [tist [mid]==kay privite key found else if (lot[mid] binary search (list, " (list[mid] key) Cheif bina

binary-search (list, midtl, hi, key); 33 (i) # indude (stdio. h) void main () [ printf ("of.d", array[a]); int arry [wo], niabiswap; Puntf (UAlternate pintf ("Enter no of elment") elements of array: ), Scanf (re/s 1", for); foi(a=0; azio; a+=2) prints (venter efod integers, n); printp (40/6 d", array[a]), for (a=0; acn; a++) Scanf (4060; farray[a]); fir (a=0; acn-1; a++) for (b=0; b=n-a-1; b++) ld) part if Carray[b] > array[b+1]} Swap = array [b]; array [b] = array[b ti]; array [b+1]=dwap; 8] Print f (Borted List in meending order:"); for (a=0; a en; att)

(ii) Include Zadio.h.) Void main () { int array [100], n.a, b, dwap, Sumeo, production; prints (u Enter no of elments:"); Scanf (11968", fn); prints prenter of d integrers (n", n); for (a=0; azn; a++) Bean & Cueld" farray [a]); for (a=0; acn-1; a++) ? For (6=0; b<n-a-1; b++) { if (array[b]) array[b+1]) } guap = array[b]; array [6]= array [6+1]; array [b+1]= Swap 333 prints (il Borted list in ascending order: ) for (a=0, acn; a++). privile (neled, array [a]) printf (" Enter up to 5 values it"), for (a=0; acs; att)

scanf (" of d", farray [a]), some side of side of the for (a 20) als; Att) { if (array [a] % 1 ==0) Summete array [a]; 3 printe ("Total Sum of Odd values 1s; %d", Sum) for (azo, acs, att) [ if array [a] %, 2 ==0) product f = array [a]; '9 5 print f (à Total Sum of even value 13: %d, produ) ( mg= 1 h 2 ") 1 (iii) include Listdioih) void main () f int array [coo], Mia, b, Swap, Count = 0; printy ("Enkr noof elments:"); Scanf ("eld", &m); printe ("Enter of d'intergers:",n); for (a =0; acn; att) Sean & ("% d", farray (a)); for Cazo, RZn-1; a++) {

for ( b=0 3 bcn-a-1; b++) { of (array [6] ) array (61) of Swap = array (6) array [b] = array [b +1] array[bil] = swap; 333 printf ("Sorted list in ascending orders); for (azo; acn; att) print prints ( nos d', array [a]); pants ("Enter the numbers"); seanf (119, dy &m); for (azo, azn; a++){ if Carray [ag % m ==0) Counttt ; 3 print f la Total elements divisible by fide % d \n", m, count?)