

Classmate unber of elements N in the sange 500 to 14500 is prints [" In 3: to exit"); print ("I'd finder your chorce: "); switch (ch)/ case 1: print[["In that the number of elements:"]

scant ['' + d'', & n);

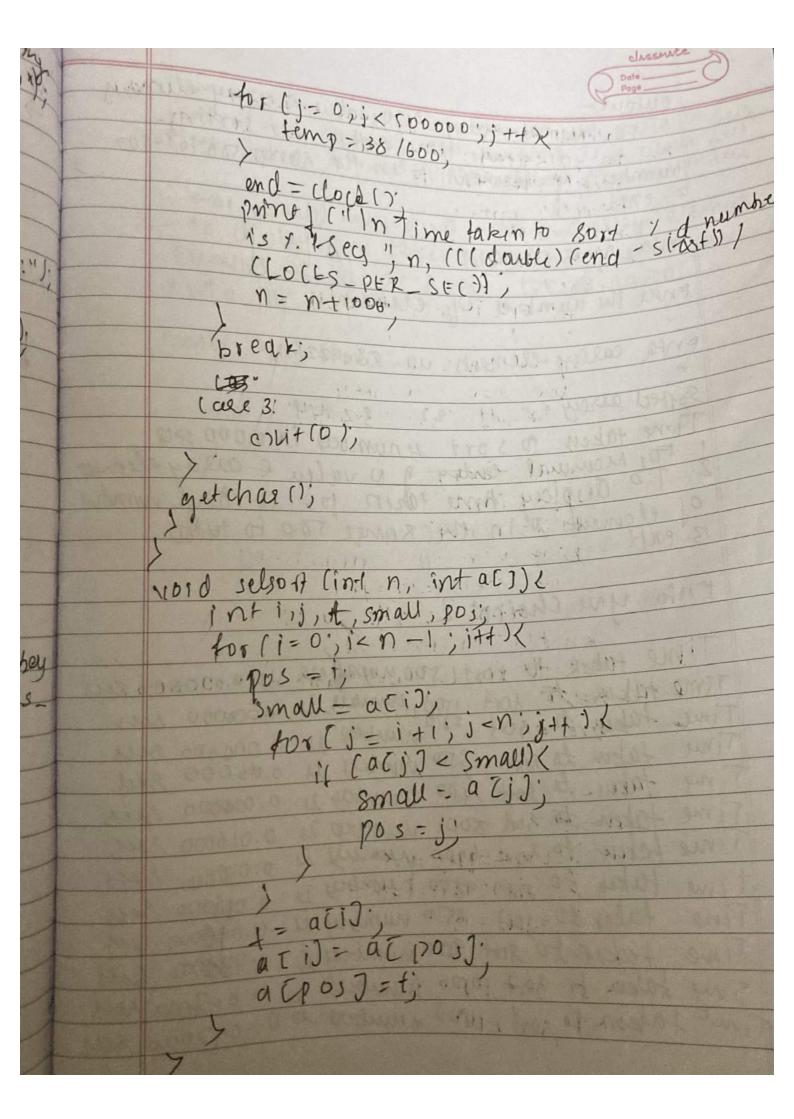
print[["Enter the array elements: In"];

for (i=0; 1=n; itt)

Scant ("'-/-d", & a(i)); end = clockit; frint (4 In sorted array is: ");

for (1=0; i<n; i+1)

print [" ./.d]t", a[i]) is 1.f secs", n, (11 double) Cend-stard)/clocks. ("In Time taken to sort y-d number n = 500; while [n <= 14500) for Ci=o; izn; i+t){
a [i]=n-i; start = clock c). seleort (nig)



output -1. For Manual enday of N value & away eliment is to display time taken for sorting winnher of element N in the range 500 to 14500 3. CMIT Enta your choice: thoughte number of element, y FIRE Carry elements: 44 33 22 11 Softed alray 15. 11 22 33 44 Time taken to sort 4 numbers is 0.000 spg

1. To monural entry of N value & curay elements
2. To display fine farin for 50 ring number
of elements is in the same 500 to 14000 13. PILIT that you Choice: 2 Time fakin to sost soo numbers is 0.000000 key Time taken to got 1000 numbers is 0.000000 sees Time taken to sort 3000 numbers is 0.000000 sees

Time taken to sort 5000 numbers is 0.016000 sees

Time taken to sort 5000 numbers is 0.016000 sees

Time taken to sort 6000 numbers is 0.016000 sees

Time taken to sort 8000 numbers is 0.016000 sees

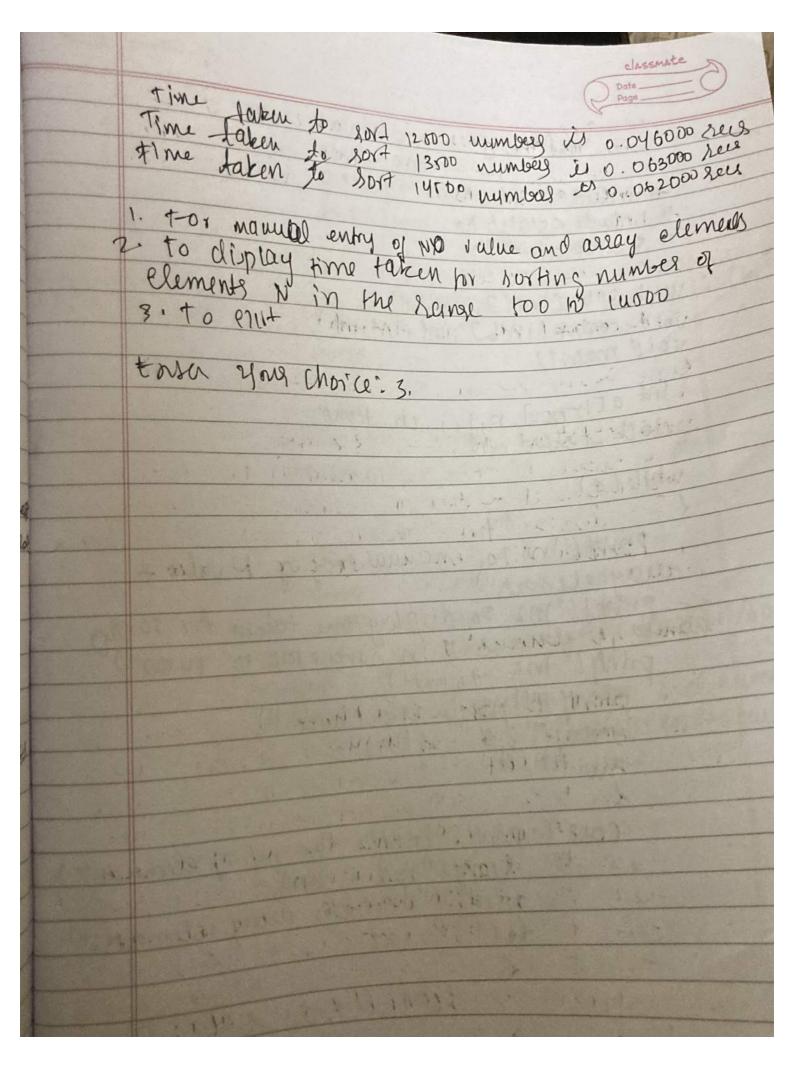
Time taken to sort 8000 numbers is 0.016000 sees

Time taken to sort 8000 numbers is 0.016000 sees

Time taken to sort 9000 numbers is 0.016000 sees

Time taken to sort 9000 numbers is 0.016000 sees

Time taken to sort 9000 numbers is 0.016000 sees Time taken to good 11000 numbers 100 0, 047000 sus



classmate 11 Merging. +t include < storon H include < Stalin . No # shelude chime. hs (loid split (inti) filas bion) void combine (int[], int, int, int, int); void man 1) clock t start, ord; while (1) prints ("In1: to manual entry of N value & away elements");

prints ("In2: To display time taken for soring number of elements N in range 500 to (4500")

prints ("In3: to enit");

prints ("Intender your choice: ");

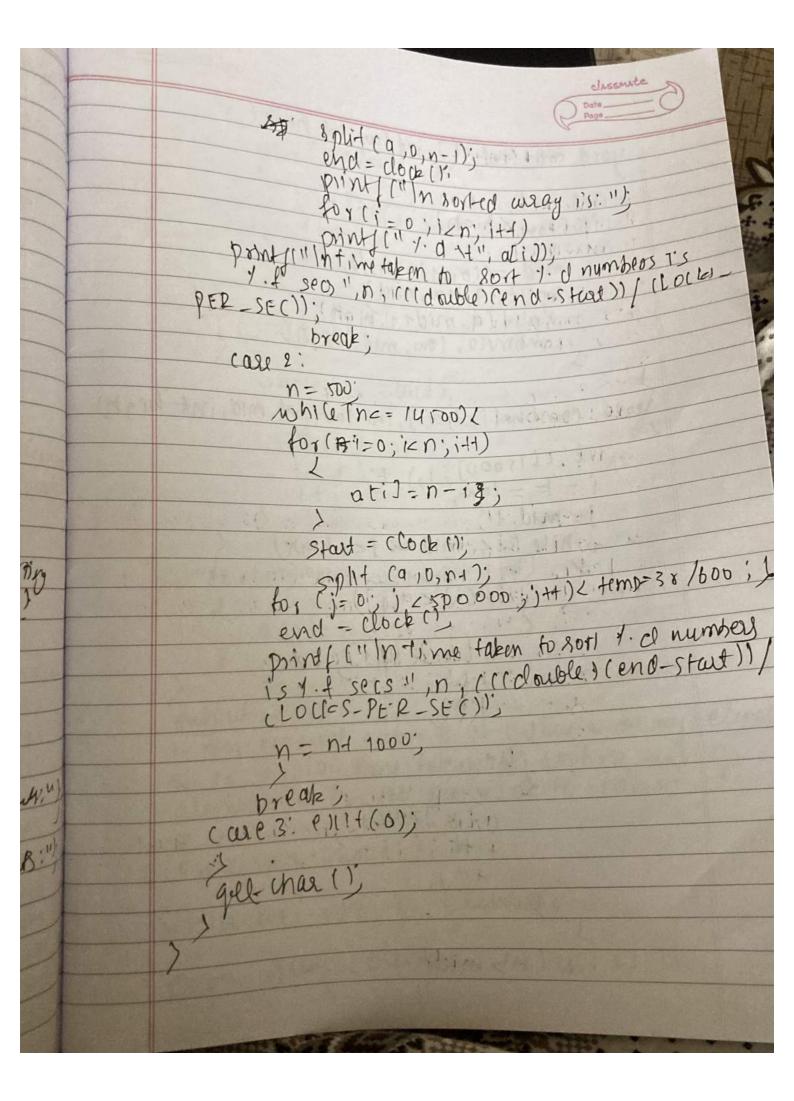
scampe" 1. U", 2 ch);

swiftn (ch) case i prints ("Inenta the ny, of elements"

Scans ("1.0", 2n);

prints ("In enter areay elements")

for (1-0; i<n; i+t) 3 cans ("1.01", 40[1]) Hert - clock 17,



yord split (inf al), ind low, int high) inf mid;
if (low Khigh) mid = ((ow-1 high)/2; & plit (a, low, mid); & plid (a, mid+1, high); rombine(o, (ow, mid, nigh)) Goid combine lint ac J, int low, int mio, int high j= mid 11; while (iz=mid 2e j == high) (i > mid)

while (j<= high)

(tf)=acij;

+tf: 1. teo; manual endry of N Value & oreary clinedy 2. to display time faken for sorting note of elements D'n the Range soo to 148000 Z. enit. Enta your choice: From array eternants: 44 33 22 11

Lorked correcy is: 11 22 33 49

Time taken to soy 24 numbers 1, 3.00000000

1. to 1 manual entry of N value & array eliming 2. To display to me taken for sotting number elements to in the same 800 to 14500

3. To enot

Entre your charce: L

to sust on soon numbers 10.000000 All to sat a descoos mumber on cooses in Just 0.000000 Number & 0.000000 801 Time taken time taken to YOVY 3500 mymbers es 0.000000 880 404 4800 number & 0.000000 800 Aukeu SOA time fakey to number is 0.00000860 1 5500 Soot-Time taken to number is 0.000000 per 6500 to 80H faken number 15 0. 000000 NO 2500 Tim feeken to sort un socooo es podmen 11.8500 Time taken to 80+ munitar iso.000000 pel 9800 taken to HOR 10500 number is 0.00000 pel Time ferren 300 11500 number as 0.00000 Time taken Sort to 12500 MUMMEU W 0. 016000 80 tuken Time to 80A numbay 13680 is a 000000 get Time taken to soft Moso rumber o 0.00000 18

2 to display time taken for 30x800 number 1 elements to in the range 500 to 14000

Bata was chorse: 3