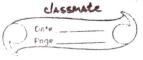
	Classmate Data
1 .	Pright
20/6/24	Week-8
	10 heapsout
	# in clude < stello. N>
	# Poclude < Koneo 4>
	#Prelude Estallibon>
	void heap-sout (not a [], int n).
	vord heapspy (Port a C3, Port n, Port s);
	vold pulat-assay (Pot all, ext n):
	vord maracy &
	904 a[15000], n, j, i, ch;
	clocket start, end's
	varile (1) {
	punty "In 1: Pour manual entry of or value and away
	elenats");
	pulity!" In 2: For To display thre taken for souting
	number of elements. N on the range 500 to 14500");
	prentfe in 3: To exetali
	puent (" In enter your chosce");
	xanga ordu, 4 ch);
	Swetch(ch) &
	lase 1:
	puenty (" in Enter the number of elements: "):
	scarp (rold, &n);
	printf (Enter away elements: "):
	puli=0; (en; 1+1) {
	scary (ord , 4 aci 3);
	<u>a</u>
	start = clock ();
	heap-sout (a,n);
	endz clocks);
	prentfc "In Sorted array es: ");
	bient-assay(a, n);
	prent ("In Time & alson to sout old numbers es
	Brush 111 1 was a good to you was warmen



% f secs in, (((double) (ord-start))/clock-Per-secs); break (ase 2° N= 500; while In call root puli=0, Pen; P++) & a (°) = n = °; Start = clock(), heapsout(q,n); tox(1:0; 125000000 9+4) & Ent temp = 38/600', endzclock(); prenty ("In Teme taken to sout old numbers es of. + secs", n. (((double)(end-start))/cclock-persec)); break: 1+=1000; break? case 3. cx24(0); getchase); I word heap-soutientally entry fallent 6= 1/2-1°, 6>50; 6--) { heappy (a, n, ?); bullet 8=n-1, 800, 1--)& Put temps a cos; C 120= C020

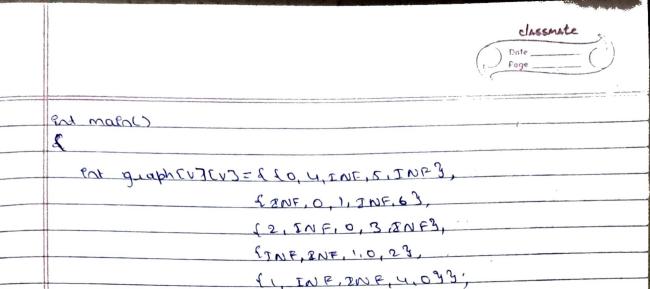
		Classmate Date Page Date
	ace)=temp?	
	heappy (a. f. o);	
	1	
	3	
	vold heappy (Pot as), got n, Pot 9) !	
	Pot largest = ?;	
	Pat left = 2 * P+1 ",	
	ent elgut: 8x9+2;	
	et (left < n & & a Eleft > a Elagest) 6	
	largest zlept;	
	3	
	3 (Itages 12 sc [tupic 2 a b 1 n > by play 39	
	largest = right;	
	1 3	
	ef Clargest 1=0) &	
	ent tempsalis;	
	ace 3 = aclangest3;	
	allagest Jeterpo,	
	heappy (a, n, largest);	
	3	
	3	
	voed prent away cent als, ent noc	
	pu(int 120; Pcn; P++)(
	prentf(10kd/t", a(1));	
	3	
	3.	
	output:	
	tendea '	
	(. For manual entery of N value and among to	elements
	2.70 desplay tome taken be southing number of	elements N Po the
	warge 500 to 14500	
	?. TO exet.	
1		



Enter your chopie: enter youththe runberg elements : 8. exter array elements: 10 20 15 20 25 35 50 60 souted away 6500 215 20 20 25 35 50 60 1. For manual enterry of is value and array climents 2. To desplay tems taken for nathery number y elements N Prothe warge 500 to 14500 3-TO Oxet. Enter your chope 3 2 Time taken to sout 500 numbers is 0.031000 sect Thre taken to sait 1500 numbers to 0,016000 sees Teme taken to sout 2500 numbers es 0.015000 secs Time traven to sout 3000 numbers & 0.016000 secs Tense taken to sout 4500 numbers is 0.031000 secs Time taken to sout 5500 numbers es 0.016000 secs Time taken to sout 6,000 numbers & 0.016000 sees Time taken to sout 2500 numbers & 0,0021000 secs Time taken to soit 8500 numbers & 0.015000 sees Time taken to sout 9000 numbers ex 0,016000 sess time taken to soit 18500 numbers & 0.016,000 secs time taken to sout 11500 numbers by 0.031000 news Time taken to sout 12500 numbers & 0.016000 secs Time taken to sout 13500 numbers & 0.015000 secs Teme taken to sout 14500 numbers & 0.031000 secs Heap sou 0.15-0,1 -

· Nyalues

	classmate Date
	D Floydwarshall
	#190 Chunde caldeo, h>
	# depen vs
	# depene INF 99999
	void prent solution (ent destersive);
	vold Jolydinashall (?nt des EJ (VJ)
	5
	ent rigit;
	101(k20), 10 CV, E++) L
	Deli=0; PCU; Est) &
	616=0; gev; g++)&
	9, (dest(:)(+)+dest(+)(3)(3)(3)(3)
	dest [?] = dest[?](x] + dest [10]();
	3
	3
	3
	pulnot solution (des+);
_	3
	Loid the Cont destrois
	€
	penty ("the pollowing mature shows the shoutest distances"
-	"between every parel of vertices \n");
	porlent :20; ?cv; ?++) {
	parcint geo; gev; g++) s
	9+(des+(1)C9]==INF)
-	brent (as, 320, 8NE 11),
	else
	brevat (201991, gent (4)(1);
	3
	punt ("1~");
	3
	3



Hoydwarshall (graph); rehuno!

Output:

The pollowing mature shows the shoutest destances

between every pars questices.

0 4 5 5 7 30146

2 6 0 3 5

37102 1 5/5 4 0