Name: Qiran Li Uni: ql239

P1

a) t=10

	index	wt	Team_Name
466	467	0.012812	NorthCentral
326	327	0.012578	LSU
436	437	0.011511	Morningside
744	745	0.011088	Wheaton
405	406	0.009633	MinnSt-Mankato
440	441	0.009507	Muhlenberg
492	493	0.009241	OhioState
679	680	0.009165	UW-Whitewater
468	469	0.009137	NorthDakotaSt
135	136	0.008941	Clemson
726	727	0.008785	WestFlorida
367	368	0.008515	MarianIN
606	607	0.008488	StJohnsMN
438	439	0.007653	MountUnion
212	213	0.007122	FerrisSt
252	253	0.007114	GrandView
243	244	0.007013	Georgia
374	375	0.006778	MaryHardin-Baylor
340	341	0.006163	Lenoir-Rhyne
575	576	0.006088	SlipperyRock
501	502	0.005900	Oregon
175	176	0.005840	DelawareValley
303	304	0.005666	JamesMadison
690	691	0.005544	ValdostaSt
217	218	0.005437	Florida

t=100

	index	wt	Team_Name
326	327	0.043642	LSU
744	745	0.025822	Wheaton
466	467	0.024442	NorthCentral
135	136	0.023704	Clemson
492	493	0.022688	OhioState
436	437	0.022621	Morningside
243	244	0.017165	Georgia
606	607	0.014990	StJohnsMN
726	727	0.013367	WestFlorida
5	6	0.012917	Alabama
679	680	0.012836	UW-Whitewater
217	218	0.012440	Florida
440	441	0.011238	Muhlenberg
501	502	0.010530	Oregon
39	40	0.010021	Auburn
495	496	0.010012	Oklahoma
405	406	0.009752	MinnSt-Mankato
367	368	0.009583	MarianIN
510	511	0.009534	PennState
690	691	0.008894	ValdostaSt
340	341	0.008070	Lenoir-Rhyne
760	761	0.008019	Wisconsin
485	486	0.007866	NotreDame
407	408	0.007532	Minnesota
252	253	0.007521	GrandView

t=1000

	index	wt	Team_Name
326	327	0.084419	LSU
135	136	0.045527	Clemson
492	493	0.043452	OhioState
243	244	0.032720	Georgia
5	6	0.024679	Alabama
217	218	0.023696	Florida
501	502	0.019266	Oregon
39	40	0.019037	Auburn
495	496	0.018703	Oklahoma
510	511	0.017974	PennState
760	761	0.015165	Wisconsin
485	486	0.014647	NotreDame
407	408	0.014201	Minnesota
54	55	0.012704	Baylor
393	394	0.012045	Michigan
686	687	0.011703	Utah
385	386	0.011663	Memphis
296	297	0.011006	Iowa
26	27	0.010923	AppalachianSt
637	638	0.010187	Texas
468	469	0.009224	NorthDakotaSt
445	446	0.009071	Navy
640	641	0.008933	TexasA&M
75	76	0.008306	BoiseSt
311	312	0.007334	KansasSt

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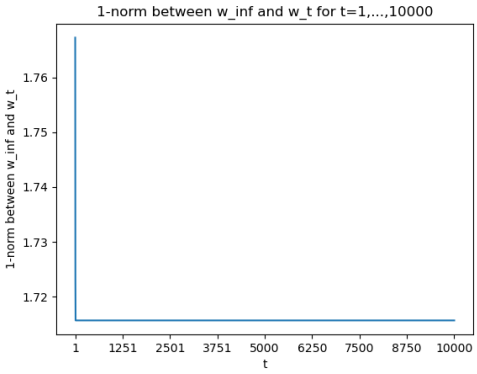
	index	wt	Team_Name
326	327	0.091366	LSU
135	136	0.049262	Clemson
492	493	0.047009	OhioState
243	244	0.035382	Georgia
5	6	0.026695	Alabama
217	218	0.025624	Florida
501	502	0.020779	Oregon
39	40	0.020582	Auburn
495	496	0.020202	Oklahoma
510	511	0.019429	PennState
760	761	0.016392	Wisconsin
485	486	0.015820	NotreDame
407	408	0.015347	Minnesota
54	55	0.013716	Baylor
393	394	0.013023	Michigan
686	687	0.012617	Utah
385	386	0.012590	Memphis
296	297	0.011894	Iowa
26	27	0.011792	AppalachianSt
637	638	0.011003	Texas
445	446	0.009785	Navy
468	469	0.009717	NorthDakotaSt
640	641	0.009658	TexasA&M
75	76	0.008943	BoiseSt
311	312	0.007916	KansasSt

b)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1-norm between w_inf and w_t
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1.75
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1.72
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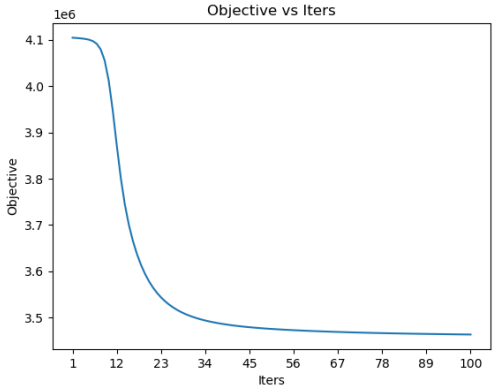
2501
3751
5000
6250
7500
8750
10000
t

P2

a)


Objective vs Iters
1e6
4.1
4.0
3.9
3.8
3.7
3.6
3.5
Objective
1
12
23
34
45
56
67
78
89
100
Iters

6)

0

	weight	word
145	0.017596	news
370	0.017392	letter
485	0.017136	article
70	0.013547	write
532	0.013343	newspaper
22	0.012215	report
563	0.012040	reporter
80	0.011977	question
18	0.011545	tell
259	0.011460	interview

1

	weight	word
7	0.021899	city
121	0.021216	building
149	0.013296	build
102	0.012812	area
330	0.012702	resident
82	0.009580	house
219	0.009466	site
220	0.009323	community
179	0.009118	local
237	0.008978	street

2

	weight	word
101	0.014853	book
21	0.012414	life
290	0.011441	editor
70	0.011318	write
562	0.008786	writer
45	0.008000	world
192	0.007767	history
695	0.007088	author
6	0.006838	man
19	0.006563	woman

3

	weight	word
31	0.020602	thing
87	0.015265	feel
99	0.014004	lot
42	0.013420	ask
18	0.013129	tell
187	0.012624	really
222	0.009701	happen
21	0.009443	life
335	0.008797	learn
115	0.008629	young

4

	weight	word
27	0.012125	issue
209	0.010556	require
137	0.010016	decision
353	0.009648	proposal
32	0.009528	member
48	0.009169	law
109	0.008618	allow
377	0.008341	committee
569	0.008269	approve
8	0.008242	plan

5

	weight	word
17	0.024578	case
162	0.022081	lawyer
126	0.021593	court
88	0.017651	charge
48	0.015748	law
313	0.015142	judge
477	0.011267	legal
404	0.010808	trial
443	0.010188	file
496	0.009909	investigation

6

	weight	word
100	0.015540	drug
139	0.014371	study
352	0.014284	doctor
202	0.012674	health
389	0.011565	patient
539	0.011554	medical
254	0.010823	cause
785	0.010346	treatment
932	0.008012	disease
22	0.007972	report

7

	weight	word
39	0.017678	pay
49	0.016957	money
13	0.014374	program
2	0.013896	state
86	0.013817	cost
257	0.013078	budget
134	0.012890	tax
1	0.011976	percent
91	0.011262	cut
93	0.010141	increase

8

	weight	word
494	0.018962	ticket
670	0.015446	tour
130	0.014276	room
287	0.012566	event
129	0.011690	free
474	0.011358	club
782	0.011226	band
574	0.010945	feature
163	0.010151	information
538	0.009725	weekend

9

	weight	word
5	0.026645	game
3	0.019815	play
40	0.018690	win
28	0.015838	team
25	0.014964	second
53	0.013649	season
103	0.012650	player
292	0.011034	victory
228	0.010269	score
14	0.009259	point

10

	weight	word
67	0.031591	police
258	0.022003	kill
6	0.020886	man
211	0.015021	death
169	0.013625	officer
558	0.010795	arrest
268	0.010548	fire
630	0.010507	victim
405	0.010159	crime
458	0.010087	shoot

11

	weight	word
3	0.017750	play
138	0.016504	music
184	0.014995	film
275	0.011410	performance
515	0.011248	audience
321	0.011089	movie
445	0.009095	stage
364	0.008783	production
55	0.008754	director
523	0.008686	theater

12

	weight	word
9	0.046750	school
218	0.038343	father
58	0.037266	student
171	0.030061	mrs
324	0.027436	son
433	0.025266	graduate
459	0.024511	daughter
252	0.022770	mother
294	0.017964	parent
20	0.017817	child

13

	weight	word
291	0.029731	contract
28	0.020861	team
143	0.017568	sign
293	0.015681	manager
66	0.014896	job
520	0.011964	agent
103	0.011567	player
278	0.010971	union
53	0.010476	season
641	0.010315	baseball

14

	weight	word
1	0.023535	percent
47	0.014971	price
34	0.014722	market
152	0.014346	rise
97	0.013277	rate
388	0.012569	economy
93	0.011405	increase
110	0.010947	low
98	0.010490	fall
284	0.009649	economic

15

	weight	word
75	0.019764	political
132	0.018650	campaign
120	0.014152	party
150	0.013836	vote
253	0.013829	republican
216	0.013344	election
319	0.013335	candidate
84	0.011938	leader
383	0.011144	democratic
2	0.009895	state

16

	weight	word
161	0.019124	art
332	0.012782	artist
649	0.011399	collection
578	0.010474	museum
262	0.010370	design
817	0.009596	photograph
760	0.009035	exhibition
597	0.007966	color
977	0.007812	paint
744	0.007670	painting

17

	weight	word
201	0.010694	different
68	0.007623	little
14	0.007551	point
31	0.006894	thing
165	0.006491	hand
38	0.006189	change
107	0.006141	far
460	0.006063	approach
181	0.005672	kind
61	0.005626	keep

18

	weight	word
476	0.010238	wear
19	0.007842	woman
6	0.007236	man
315	0.006806	walk
229	0.006298	stand
371	0.005883	sit
155	0.005814	car
231	0.005749	drive
23	0.005702	place
799	0.005426	dress

19

	weight	word
12	0.016565	american
11	0.015628	states
15	0.015062	government
24	0.014585	country
188	0.014067	military
153	0.013990	war
84	0.010824	leader
4	0.010092	official
63	0.009246	force
430	0.007575	international

20

	weight	word
0	0.031242	company
113	0.016069	share
140	0.015987	stock
1	0.014222	percent
79	0.013672	sell
235	0.012581	bank
320	0.012539	financial
36	0.011733	business
35	0.011710	yesterday
69	0.011616	executive

21

	weight	word
350	0.012224	plant
233	0.010721	water
149	0.010413	build
362	0.009753	development
686	0.008139	nuclear
317	0.007886	develop
102	0.007679	area
1148	0.007486	environmental
200	0.007342	project
125	0.006965	power

22

	weight	word
4	0.031630	official
346	0.014669	spokesman
22	0.014607	report
35	0.013549	yesterday
174	0.012717	board
180	0.011024	agency
7	0.010888	city
78	0.010042	service
415	0.009791	department
823	0.009575	plane

23

	weight	word
0	0.027139	company
265	0.015980	computer
328	0.011372	product
79	0.010509	sell
36	0.010174	business
535	0.010065	network
212	0.009694	store
33	0.009305	president
69	0.009244	executive
403	0.009241	customer

24

	weight	word
270	0.015987	food
144	0.009445	serve
876	0.008727	fresh
1166	0.008714	dry
466	0.008562	restaurant
721	0.008432	pound
918	0.008125	taste
41	0.007262	add
1078	0.007247	fish
1044	0.007141	cook