

## PBS1 Lab Assignment 03 (420up B)

Mame: Shubham Chemate

Roll No. (31118)

PICT, PUNE	
	and the second of such and
	Title: Mongo DB: map-reduces operations
Line	il other that in disposin spend production
*	Reoblem-statement:
Shinger	Implement map reduce operations with surtable
	examples in mongops.
	Objectives:
	17 To understand the concept of map-reduce
	2) To apply map reduce as a data-processing
southway go	paradigm for condensing large volumes of data
	Into useful aggregate methods.
	tradamparuhat madach
	Ontromes:
	1> leasu about corrept of map-reduce in mongo DB
	7 The application & execution of map reduce to
	Condence large volume of data into aggregate
	Testing.
	Soffware requirements
	17 mongo PB tipdated to latest version
nl of	2) mongoin updated to latest version
tombox	3) operating system widows - 10 (64-leit)
Sul an	Marin and I I want and hand
	Hardware regurements
1, 1, 11	17 Intel core-is 8th gen 4-core processor
alocal a	> 8GB RAM, 512 GB SSD Storage
1 121	Theory Related Concepts.



from the

TIOI, TORL	
	Mapredure in mangaps:
	-map reduce is a data-processing paradigm, for
	condensing large amonts of data into useful
	dance and a country
1deta	- to perform map reduce operation, mongops provides
	to perform map reduce operations, mongops provides  the map-reduce database command
	mapreduce command.
	Syntax:
	ab. collection, map Reduce
Total le	function() dent (key, val); I map function
	function (key, values)
	1 return reduce function)
	d the second of
	out: collection,
	query: doament,
	Sorf: downerb,
	linub: number
	1
	A PARAMONIAN Y
	the map reduce operation first queries the
	collection, then maps the result documents to
	emit key-value pass, which is they reduced
	kased on the keys that have multiple value.
	In the above syntax:
	, map function It is savascript function that
	maps a value costs key 4 emils a key-value
	pag.
	2) reduce function: It is Js function that
	reduces @ granps all documents having
White the same of	



PICT, PUNE	
	same key
41	3) out: It specifies the location of the
ania	map-reduce query result.
-	4) query: It spenties the optional selection
	eritaria for selecting documents.
	i) sort: It specifies the optional sort criteria.
	1) limb: Sh specifies the optional maximum
	number of documents to the returned
	named of additions to the contract
	- In mongops, the map reduce operation can
	write results to a collection of return the
	gesulf intre.
	-If the mapreduce output is written in a
	bleetion (uing out parameter), then we can
	view the result using find operator.
	syntax: db. map-reduce-output.find()
	where
	'map-reduce-output' is the none of the
	collection to which map-reduce operation
	written the result
	- The map-reduce gueries con-be used to construct
	large complex aggregation queries. The use of
	uniform Is function makes un of map-reduce
	which is very flexible & powerful.
	The state of the s
	Then
	Tests cases
	The code files & ordput screenshots are attached
	Separately



PICT, PUNE	
	Conclusion;
	In this assignment, I larved the concept of
	map-reduce & implemented it to vondeuse large
1101	volume of data into aggregate results in a
	Collection
a paster	Hot Isrady art arting it wine ?
10070	as of towards all waters to dead to
1 hou	subserved to the month of sylvens sodies
1000	withing souther and off adaption xt -
11000	words to weatsolf west attends after
	Secret Inches
13	NE WATER OF FIRE OF THE STATE OF TE
101 14	more, explanation that course the state of the
	Political double pailes divise but busin
	Martin Ballo Lanchar good de Switze
5-11-1	To a prove at a Marker another great
adal acous	
	Muris and notice
of arduna	of him is due of the state of the self-
lo k	2 517, Triong waterpropert Religionaries
- Justine a	To the modern of the state of t
	Lot 3 mg & Aldralt year Listanda
	thing soil is
And soller	an extension had a 2 data history with
	Alderson September 1 Alderson