Week 2-MPI K200353 Nowin Ali Miles
Chosta Diagram:
Cluster Diagram:
Ci Co - n=300 (augulors Distribute) Memory Manure
Memory Manure
[Shared Network]
Roblem: If we wish to sum a large array of
integers then this will require a lot of # the excusa
time therefore we can make this placess go
integers then this will require a lot of the exercise integers then this will require a lot of the exercise time therefore we can make this storess go faster by using Distibuted Memory Machine.
Workflow:
Assume that we have soo completes & that the menoy
space to of book is divided into lok segments.
Of Juk zuk 30k yuk sok 60k 70k dok 90k 100k.
Sum lieuding the air
we will be using SPMD approach wither than SIMD beroute
a single program with multiple data will be divided into mitte
computers.
Madel - MI 1C2 13 1 Ca
Distribute/scotte
O low 1 20k 30k tok & lawk 70 cakoble better
Slaves Sun of lok limit
Process floors floors floors
Callect haver.
Finol SUM

Rengo Coops.	Notes.
Beull	
Is(node] A == 0) // Moster	mater Node
Read from file (all,"_"); fort for each (aud lok integer in all)	Read the all from fit
Red for each (and lok integer in all)	
3	Distribute the 30x
Stort Rings ();	coments of integers
End Range = (); send rode MPI Send (0;) Review node.	1 to each computer
MPT Send (O.)	(Sender master,
Reize node.	Reciens Stars)
3	
do_processing (arr). for each (lok integers in arr)	Sum individual batch because monter will also
Processola (sols integers in arr)	
7 100 0 0 0 0 3	read each result of then sun to final result.
I MPT_ROOD (); 5	Prints the final Yesult
print();	
3	For stars.
else 1/Slave	Not of a kep become
1 MPI_Racieve(0)	individual computer. Sum Sum I ote integers
N accina (seve the ourh issult
MAT send (result, 0)	
£	