**Conclusion:**

In this paper we have proposed the MACO algorithm for achieving tasks scheduling with load balancing, and we have experimentally evaluated the M\_LB\_ACO algorithm in applications with the number of tasks varying from 1 to 100. One machine can execute a single task at a time .but Our system will detect the execution time of a task automatically. If a new task comes and all the machines are busy, then load balancer will create another machine if the cost of machines fulfils the budget function. If the budget exceeds, then load balancer will add the task onto queue and then the MACO algorithm will find the optimized machine to reduce cost and time where the task will be executed. If there is no new task, then the idle machines will be turned off and thus cost will be reduced. The experimental result shows that the LBACO balance the entire system load effectively. Weather the sizes of the tasks are the same or not, LBACO can handle all conditions, and outperforms FCFS and ACO algorithms in cloud computing environment. this proposed work is developed for achieving better resource utilization, minimum completion time and improve the system of performance in a cloud computing environment.