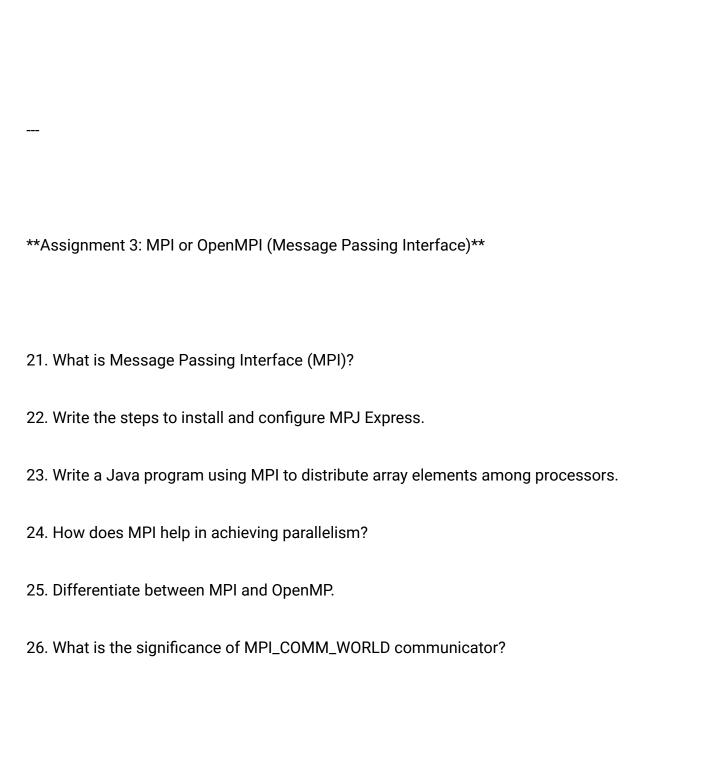
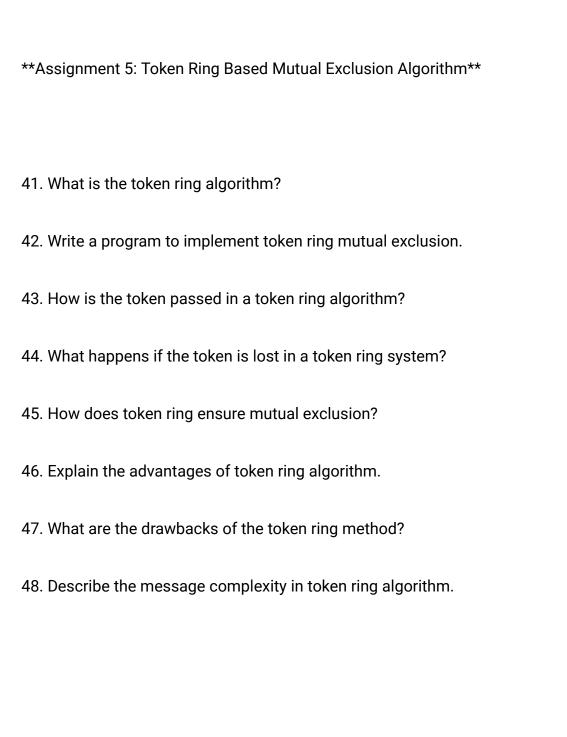


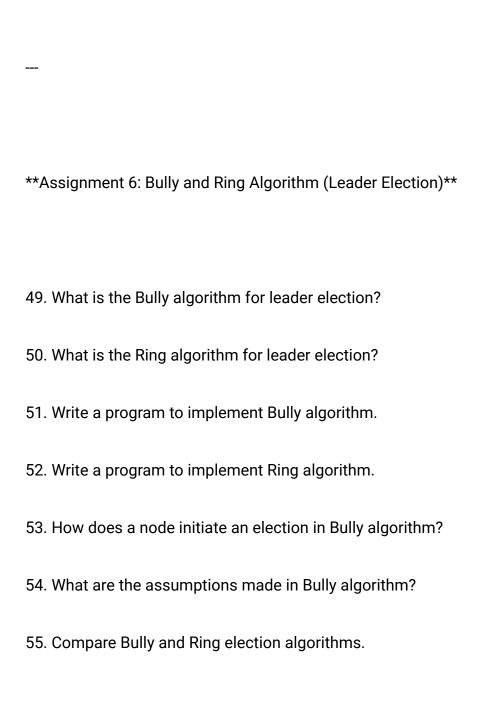
11. What is CORBA?
12. Explain the concept of IDL (Interface Definition Language) in CORBA.
13. Write the steps involved in creating a CORBA-based application in Java.
14. What is the role of the ORB (Object Request Broker) in CORBA?
15. Differentiate between CORBA and RMI.
16. Write a program to create a simple CORBA server and client for a Calculator application.
17. What is IIOP in CORBA?
18. What is Portable Object Adapter (POA) in CORBA?
19. Explain the role of the Naming Service in CORBA.
20. How does Java support CORBA integration?



27. Explain the use of MPI_Send and MPI_Recv functions.
28. What is the difference between Scatter and Gather in MPI?
29. How are the intermediate sums calculated in distributed array sum using MPI?
30. Explain Single Program Multiple Data (SPMD) model with respect to MPJ Express.
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**Assignment 4: Berkeley Algorithm (Clock Synchronization)**
31. What is Berkeley's algorithm?
32. Write steps involved in Berkeley clock synchronization.

33. How is the master node selected in Berkeley's algorithm?
34. Explain the importance of clock synchronization in distributed systems.
35. Differentiate between Cristian's algorithm and Berkeley's algorithm.
36. How is the average clock offset calculated in Berkeley's algorithm?
37. What are the features of Berkeley's algorithm?
38. How does Berkeley's algorithm handle faulty nodes?
39. What is the role of master and slave nodes in Berkeley's algorithm?
40. Illustrate Berkeley's algorithm with an example.





56. How does the Ring algorithm ensure fairness during election?
**Assignment 7: Web Services (SOAP and REST)**
57. What is a web service?
58. Differentiate between SOAP and REST web services.
59. Write steps to create a simple SOAP-based web service in Java.
60. What is WSDL?
61. Explain the basic architecture of a SOAP-based web service.

62. What is UDDI?
63. How does RESTful web service differ from traditional web services?
64. Write steps to create a simple RESTful web service.
65. What are the HTTP methods used in RESTful web services?
66. Explain how to consume a web service in a Java client application.
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**Extra Questions**
67. What is distributed computing?