Bully Algo

In [ ]:
```
def MyInput(smg):
    print(smg, end ="")
    ans = input()
    print(ans)
    return ans
```

Ring Algo

In [ ]:
```
coordinator = 0
n = int(input(("Enter the number of process: ")))
status = []
priority = []


def Bulley(initiator):
    global coordinator
    coordinator = initiator

    for i in range(n):
        if priority[initiator] < priority[i]:
            print(f"Election message is sent from {initiator+1} to {i+1}")
            if status[i] == 1 and i < n:
                Bulley(i + 1)


for i in range(n):
    print(f"For Process {i+1}:")
    status.append(int(MyInput("Status: ")))
    priority.append(i+1)
initiator = int(MyInput("Which process will initiate election? "))
Bulley(initiator-1)
print(f"Final coordinator: {coordinator}")
```

```
For Process 1:
Status: 1
For Process 2:
Status: 1
For Process 3:
Status: 1
For Process 4:
Status: 1
For Process 5:
Status: 1
For Process 6:
Status: 1
For Process 7:
Status: 0
Which process will initiate election? 1
Election message is sent from 1 to 2
Election message is sent from 3 to 4
Election message is sent from 5 to 6
Election message is sent from 5 to 7
Election message is sent from 3 to 5
Election message is sent from 6 to 7
Election message is sent from 3 to 6
Election message is sent from 3 to 7
Election message is sent from 1 to 3
Election message is sent from 4 to 5
Election message is sent from 6 to 7
Election message is sent from 4 to 6
Election message is sent from 4 to 7
Election message is sent from 1 to 4
Election message is sent from 5 to 6
Election message is sent from 5 to 7
Election message is sent from 1 to 5
Election message is sent from 6 to 7
Election message is sent from 1 to 6
Election message is sent from 1 to 7
Final coordinator: 6
```

In [ ]:

```
node = []
status = []
election = []

n = int(MyInput("Enter no. of process: "))
for i in range(n):
    node.append(i + 1)
    status.append(int(MyInput(f"Enter Status of process {i+1}: ")))

for i in range(len(node)):
    if status[i] != 0:
        election.append(node[i])

print(f"Coordinator is {max(election)}")
```

```
Enter no. of process: 7
Enter Status of process 1: 1
Enter Status of process 2: 0
Enter Status of process 3: 1
Enter Status of process 4: 1
Enter Status of process 5: 0
Enter Status of process 6: 1
Enter Status of process 7: 1
Coordinator is 7
```