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Aim **:** To Implement the Bully Algorithm.

Code**:**

BullyAlgoExample2.java

```
import java.util.Scanner;

// create process class for creating a process having id and statusclass
Process{
    // declare variables
    public int id;
    public String status;

    // initialize variables using constructorpublic
    Process(int id){
        this.id = id; this.status
        = "active";
    }
}
// create class BullyAlgoExample2 for understanding the concept of Bully algorithmpublic class
BullyAlgoExample2 {

    // initialize variables and array
    Scanner sc;
    Process[] processes;
    int n;

    // initialize Scanner class object in constructorpublic
    BullyAlgoExample2(){
        sc= new Scanner(System.in);
    }

    // create ring() method for initializing the ring
            boolean higherProcesses = false;

            // iterate all the processes
            for(int i = idOfInitiator + 1; i< n; i++){
                if(processes[i].status == "active"){
                    System.out.println("Process "+idOfInitiator+" Passes Election("+idOfInitiator+")
message to process" +i);
    // main() method start
    public static void main(String[] args) {

        // create instance of the BullyAlgoExample2 class BullyAlgoExample2
        bully = new BullyAlgoExample2();
```

```
        // call ring() and performElection() method
        bully.ring();
        bully.performElection();

    }

}
```

```
A:\Users\Sohail Sayyed\Desktop\Desktop 1\college files\Sem VIII\DC\DC Labs>java BullyAlgoExample2
Enter total number of processes of Processes
4
Process having id 3 fails
Process 0 Passes Election(0) message to process1
Process 0 Passes Election(0) message to process2
Process 1Passes Ok(1) message to process0
Process 2Passes Ok(2) message to process0
Process 1 Passes Election(1) message to process2
Process 2Passes Ok(2) message to process1
Finally Process 2 Becomes Coordinator
Process 2Passes Coordinator(2) message to process 1
Process 2Passes Coordinator(2) message to process 0
End of Election
```

Conclusion:

Bully Algorithm has been executed successfully and gives the required output.