**package** Question4;

**class** FindMajorityElement

{

**void** printMajority(**int** a[], **int** size)

{

**int** cand = findCandidate(a, size);

**if** (isMajority(a, size, cand))

System.***out***.println(" " + cand + " ");

**else**

System.***out***.println("No Majority Element");

}

**int** findCandidate(**int** a[], **int** size)

{

**int** maj\_index = 0, count = 1;

**int** i;

**for** (i = 1; i < size; i++)

{

**if** (a[maj\_index] == a[i])

count++;

**else**

count--;

**if** (count == 0)

{

maj\_index = i;

count = 1;

}

}

**return** a[maj\_index];

}

**boolean** isMajority(**int** a[], **int** size, **int** cand)

{

**int** i, count = 0;

**for** (i = 0; i < size; i++)

{

**if** (a[i] == cand)

count++;

}

**if** (count > size / 2)

**return** **true**;

**else**

**return** **false**;

}

**public** **static** **void** main(String[] args)

{

FindMajorityElement majorelement = **new** FindMajorityElement();

**int** a[] = **new** **int**[]{1, 3, 3, 1, 2};

**int** size = a.length;

majorelement.printMajority(a, size);

}

}