**import** java.util.ArrayList;  
**import** java.util.Random;  
  
  
  
*/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*  
 \* Complete your program from here.  
 \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/  
  
//applicant class***class** Applicant {  
  
 String name;  
 **int** number\_of\_voters;  
  
  
 **public** Applicant(String name, **int** number\_of\_voters) {  
 *// TODO Auto-generated constructor* **this**.name = name;  
 **this**.number\_of\_voters = number\_of\_voters;  
 *//System.out.println(name+number\_of\_voters);* }  
  
 **public void** init() {  
 number\_of\_voters = 0;  
 }  
 **public void** elect() {  
 number\_of\_voters = number\_of\_voters+1;  
 }  
 **public int** getVotes() {  
 **return** number\_of\_voters ;  
 }  
 **public** String getName() {  
 **return** name ;  
 }  
  
}  
  
*//ballot class***class** Ballot **implements** calculate{  
  
 ArrayList<Applicant> applicants;  
 **int** max\_no\_voters;  
 **int** date\_of\_poll;  
 **boolean** number\_of\_voters\_reset = **true**;  
 **int** total;  
 **int** max\_number=0;  
 **int** max\_id=0;  
 String max\_name=**null**;  
 **float** per=0.0f;  
 *//ArrayList<vote> Votes;* **public** Ballot(ArrayList<Applicant> applicants, **int** i, **int** j, **boolean** b) {  
 **this**.applicants = applicants;  
 max\_no\_voters = i;  
 date\_of\_poll = j;  
 number\_of\_voters\_reset = b;  
 **if**(number\_of\_voters\_reset==**true**)  
 {  
 max\_no\_voters=0;  
 }  
  
 }  
**public** Ballot(ArrayList<Applicant> applicants, **int** i, **int** j) {  
  
 *//-.wrong ->this.applicants = applicants;* max\_no\_voters = i;  
 date\_of\_poll = j;  
}  
  
 **public void** results() {  
 *// TODO Auto-generated method* **int** total=computevoters();  
 String w\_name=winner();  
 per =(**float**)(total\*100)/max\_no\_voters;  
  
 System.out.println(**"Participation rate -> "**+String.format(**"%.1f"**, per));  
 System.out.println(**"Effective number of voters -> "**+total);  
 System.out.println(**"The chosen chef is -> "**+w\_name);  
  
 **for**(**int** i=0;i<applicants.size();i++)  
 {  
 System.out.printf(**"\n %s ->%.1f percent of voters"**,applicants.get(i).getName(),(applicants.get(i).getVotes()\*100.0/total));  
 }  
  
 }  
  
  
**public int** computevoters() {  
 **int** sum = 0;  
  
 **for** (**int** i = 0; i < applicants.size(); i++) {  
 sum = sum + applicants.get(i).getVotes();  
  
 }  
 **return** sum;  
 }  
  
**public** String winner() {  
 *// TODO Auto-generated method  
 //applicants.size();  
 // For Loop for iterating ArrayList* **for** (**int** i = 0; i < applicants.size(); i++) {  
 **if**(max\_number<applicants.get(i).getVotes()) {  
 max\_number=applicants.get(i).getVotes();  
 max\_name=applicants.get(i).getName();  
 }  
  
 }  
 **return** max\_name;  
  
 }  
  
  
  
  
 }*//class end***interface** calculate{  
 **public** String winner();  
 **public int** computevoters();  
 **public void** results();  
}  
  
  
*/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*  
 \* Do not modify the next part of code  
 \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/***class** Utils {  
  
 **private static final** Random RANDOM = **new** Random();  
  
 *// DO NOT USE THIS METHOD INSIDE YOUR CODE* **public static void** setSeed(**long** seed) {  
 RANDOM.setSeed(seed);  
 }  
  
 *// generate a whole number between 0 and max (max not included)* **public static int** randomInt(**int** max) {  
 **return** RANDOM.nextInt(max);  
 }  
}  
  
*/\*\*  
 \* Class for testing the simulation  
 \*/***class** Voting {  
  
 **public static void** main(String args[]) {  
 Utils.setSeed(20000);  
 *// TEST 1* System.out.println(**"Test part I:"**);  
 System.out.println(**"--------------"**);  
  
 ArrayList<Applicant> applicants = **new** ArrayList<Applicant>();  
 applicants.add(**new** Applicant(**"Tarek Oxlama"**, 2));  
 applicants.add(**new** Applicant(**"Nicolai Tarcozi"**, 3));  
 applicants.add(**new** Applicant(**"Vlad Imirboutine"**, 2));  
 applicants.add(**new** Applicant(**"Angel Anerckjel"**, 4));  
  
 *// 30 -> nombre maximal of voters  
 // 15 day of poll* Ballot ballot = **new** Ballot(applicants, 30, 15, **false**);  
  
 ballot.results();  
  
 *// END OF TEST 1  
/\*  
 // TEST 2  
 System.out.println("Test part II:");  
 System.out.println("---------------");  
  
 ballot = new Ballot(applicants, 20, 15);  
 /\*  
 \* // all the ballots pass the check of the date ��������// the parameters to  
 \* simulate are in order ��������// the percentage of voters and the day of the  
 \* vote  
  
 ballot.simulate(0.75, 12);  
 ballot.countVotes();  
 ballot.results();  
  
 ballot = new Ballot(applicants, 20, 15);  
  
 ballot.simulate(0.75, 15);  
 ballot.countVotes();  
 ballot.results();  
  
 ballot = new Ballot(applicants, 20, 15);  
  
 ballot.simulate(0.75, 15);  
 ballot.countVotes();  
 ballot.results();  
 //END OF TEST 2  
\*/* }  
}