import java.util.\*;

class Person {

protected String firstName;

protected String lastName;

protected int idNumber;

// Constructor

Person(String firstName, String lastName, int identification){

this.firstName = firstName;

this.lastName = lastName;

this.idNumber = identification;

}

// Print person data

public void printPerson(){

System.out.println(

"Name: " + lastName + ", " + firstName

+ "\nID: " + idNumber);

}

}

class Student extends Person{

private int[] testScores;

private int id;

private int sum=0;

private int result=0;

public Student(String firstName,String lastName,int id,int[] testScores)

{

super(firstName,lastName,id);

this.testScores=testScores;

this.id=id;

}

char calculate()

{

for(int i=0;i<testScores.length;i++)

{

sum=sum+testScores[i];

}

result=sum/testScores.length;

if(result >=90 && result<=100 ){

return 'O';

}else if(result>=80 && result<90){

return 'E';

}

else if(result>=70 && result<80){

return 'A';

}

else if(result>=55 && result<70){

return 'P';

}else if(result>=40 && result<55){

return 'D';

}else{

return 'T';

}

}

}

class Solution {

public static void main(String[] args) {

Scanner scan = new Scanner(System.in);

String firstName = scan.next();

String lastName = scan.next();

int id = scan.nextInt();

int numScores = scan.nextInt();

int[] testScores = new int[numScores];

for(int i = 0; i < numScores; i++){

testScores[i] = scan.nextInt();

}

scan.close();

Student s = new Student(firstName, lastName, id, testScores);

s.printPerson();

System.out.println("Grade: " + s.calculate());

}

}