public class Main{

public static void main(String[]args){

int num=144;

int n=num;

int k=String.valueOf(num).length();

int sum=0;

while(num>0){

int rem=num%10;

sum+=Math.pow(rem,k);

num=num/10;

}

System.out.println(sum);

if(n==sum){

System.out.println("armstrong number");

}

else{

System.out.println("not a armstrong number");

}

}

}