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class tax{
public static void main(String args[]){
double th[]= new double[101];
int s;
double tl;
double tr;
double ls;
double w;
double cs;
double ys;
double b1;
double b2;
double tr1;
double tr2;
double tr3;
double wel;
double maxwel;
double maxtl;
int t;
int n;
for (s=1;s<101;s++){
th[s]=0.02*s;
}
maxtl=0;
maxwel=-999;
for (n=20;n<45;n++){
tl=0.01*n;
tr1=0.01;
tr2=0.02;
tr=tr1;
b1=bud(tl,tr1);

t=0;
while (t<100) {
b2=bud(tl,tr2);
tr3=tr2-b2*(tr2-tr1)/(b2-b1);
tr1=tr2;
tr2=tr3;
b1=b2;
if (b2*b2<0.00001){
t=1000;
}
t=t+1;
}
tr=tr2;
wel=seekwel(tl,tr);
if (wel>maxwel){
maxtl=tl;
}
if (wel>maxwel){
maxwel=wel;
}
}
System.out.println(maxtl);
}
static double ux(double c1,double l1){
double u1;

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u1=Math.log(c1)+Math.log(1-l1);
return u1;
}
static double bud(double tl,double tr){
double bx;
int s;
double w;
double y1;
double c1;
double l1;
double th[]=new double[101];
for (s=1;s<101;s++){
th[s]=0.02*s;
}
bx=0;
for (s=1;s<101;s++){
w=(1-tl)*th[s];
l1=(w-tr)/(2*w);
if (l1<0)l1=0;
y1=th[s]*l1;
c1=w*l1+tr;
bx=bx+y1-c1;
}
return bx;
}
static double seekwel(double tl,double tr){
double sw;
int s;
double w;
double l1;
double c1;
double th[]=new double[101];
for (s=1;s<101;s++){
th[s]=0.02*s;
}
sw=0;
for (s=1;s<101;s++){
w=(1-tl)*th[s];
l1=(w-tr)/(2*w);
if (l1<0)l1=0;
c1=w*l1+tr;
sw=sw+ux(c1,l1);
}
return sw;
}
}

```