

algol,n<

begin

comment

<https://projecteuler.net/problem=112>

Answer: 1587000

Time: 25518.52s = 7h 5m 18.52s

No buffer, no for:

Time classic: 30380.22

Time turbo: 28390.72 6.5pct

Buffer, no for:

Time classic: 30569.63

Time turbo: 28580.12 6.5pct

No buffer, for:

Time classic: 25329.12

Time turbo: 24158.28 4.6pct

Buffer, for:

Time classic: 25518.52

Time turbo: 24347.68 4.6pct

;

real clock;

real procedure clock count;

code clock count;

1, 37;

zl , grf p-1 ; RF:=clock count; stack[p-1]:=RF;

e;

boolean procedure bouncy(n);

value n;

integer n;

begin

integer d,lastd;

boolean up,down;

bouncy:=up:=down:=false;

lastd:=n mod 10;

n:=n:10;

for n:=n while n>0 do

begin

d:=n mod 10;

if d>lastd \vee (d=lastd \wedge up) then

up:=true

else

if d<lastd \vee (d=lastd \wedge down) then

down:=true;

if up \wedge down then

begin

bouncy:=true;

goto finish

end bouncy;

n:=n:10;

lastd:=d

end for;

finish:

end bouncy;

integer i,bcount;

```
clock count;
bcount:=0;
for i:=1 step 1 until 999999999 do
begin
  if bouncy(i) then bcount:=bcount+1;
  if bcount*100/i>99 then goto found
end;
writetext (<bad>);
found:
clock:=clock count;
writecr;
writeinteger (<p>,bcount);
writecr;
writeinteger (<p>,i);
writecr;
write (<ddddddd.dd>,clock)
end;
t<
```