

Corrigés Bac pratique Informatique

*Sections Scientifiques (math, sciences et technique)
mai 2014 ()*

Mardi Mai 27 à 8H

```
program B2705148H;
uses wincrt;
type
tab=array[1..20] of integer;
var
n,m,nb,x,y:integer;
ok1,ok2:boolean;
chn,chl:string;
t1,t2:tab;

procedure saisie(var e:integer;borne:integer;nn:string);
begin

    repeat
        write('Donnez un nombre ',nn,' : ');
        readln(e);
        until ((e>=borne) and (e<=999)) ;

end;

function chercher(e:integer;v:tab;y:integer):integer;
var
nb,i:integer;
ok:boolean;
begin
nb:=0;
i:=1;
ok:=false;
while((i<=y) and (ok=false)) do
begin
if(v[i]=e)
then
begin
ok:=true;
nb:=i;
end
else
begin
i:=i+1;
end
end
end
```

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        end;
    end;

    chercher :=nb;
end;

function commun(t,v:tab;x,y:integer):integer;
var
    nb,i:integer;

begin
    nb:=0;
    for i:=1 to x do
        begin
            nb:=nb+chercher(t[i],v,y);
        end;
    end;

    commun :=nb;
end;

function somme_divisible(u:integer):integer;
var
    s,i:integer;
begin
    s:=0;
    for i:=1 to u div 2 do
        begin
            if(u mod i =0)
            then
                s:=s+i;
            end;
        end;
    end;

    somme_divisible :=s;
end;

procedure verif(e:integer;var ok:boolean;var t:tab;var i:integer);
var
    u0,u1:integer;
    ch1:string;
begin

    u1:=e;
    i:=1;
    t[i]:=u1;
    repeat
```

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u0:=u1;
u1:=somme_divisible(u0);

i:=i+1;
t[i]:=u1;

until((u1=1) or (u0=u1));

ok:=u0<>u1;

end;

procedure affiche(t:tab;n:integer);
var
i:integer;
begin
  for i:=1 to n do
    write(t[i], ' ');
  end;
end;

procedure affichage(n,m,nb:integer;ok1,ok2:boolean;t,v:tab;x,y:integer);
begin
  if(ok1=true)
  then
  begin
    write(' La suite Aliquote de ',n,' est: ');
    affiche(t,x);
    writeln;
  end
  else
  begin
    writeln('La suite n'est pas Aliquote');
    writeln;
  end;

  if(ok2=true)
  then
  begin
    write(' La suite Aliquote de ',m,' est: ');
    affiche(v,y);
    writeln;
  end
  else
  begin
    writeln('La suite n'est pas Aliquote');
  end;
end;
```

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writeln;  
end;  
  
writeln('Le nombre de termes commun est: ',nb);  
end;  
  
begin  
  saisie(n,10,'n');  
  saisie(m,n,'m');  
  verif(n,ok1,t1,x);  
  verif(m,ok2,t2,y);  
  nb:=commun(t1,t2,x,y);  
  affichage(n,m,nb,ok1,ok2,t1,t2,x,y);  
end.
```