

# Corrigés Bac pratique Informatique

Sections Scientifiques(math, sciences et technique)

19 mai 2009 (9h, 10h30, 14h, 15h30)

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Mardi 19 mai 2009 à 9h

```
program bac_p19052009_9h;
uses wincrt;
type
tab=array[1..30] of integer;
var
t,ts:tab;
n,p:integer;
function saisie:integer;
var
x:integer;
begin
    writeln('Donner la taille du tableau: ');
    readln(x);
saisie:=x;
end;
procedure remplir(var tab;var n:integer);
var
i:integer;
begin
    repeat
        n:=saisie;
    until(n in [5..30]);
    for i:=1 to n do
        begin
            repeat
                write('donner l'element n°',i,': ');
                readln(t[i]);
            until(t[i]>=0);
        end;
    end;
end;
procedure former(var ts:tab;var p:integer;t:tab;n:integer);
var
i,j,k:integer;
begin
    repeat
        writeln('Donner l'entier K: ');
        readln(k);
    until (k>1) and (k<n);
    i:=1;
    p:=1;
    while (i+k-1 <=n) do
        begin
            for j:=i to k+i-1 do
                ts[p]:=ts[p]+t[j];
            p:=p+1;
            i:=i+1;
        end;
        p:=p-1;
    end;
end;
procedure affiche(ts:tab;p:integer);
var
i:integer;
begin
    for i:=1 to p do
```

Correction proposée par  
Mr BenHmida Haythem

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writeln('ts[' ,i, ']= ',ts[i]);  
end;  
begin  
remplire(t,n);  
former(ts,p,t,n);  
affiche(ts,p);  
end.
```

```
program bac_p19052009_10h30;
uses wincrt;
type
tab=array[1..30] of string[5];
var
t:tab;
n,s:integer;
procedure remplir(var tab;var n:integer);
var
i:integer;
begin
  repeat
    writeln('Donner la taille du tableau: ');
    readln(x);
  until(n in [2..30]);
  for i:=1 to n do
    begin
      repeat
        write('donner la chaine n° ',i,': ');
        readln(t[i]);
      until(length(t[i]) in [1..5]);
    end;
  end;
function somme(t:tab;n:integer):integer;
var
i,j,d,e,s:integer;
ch,ch1:string[5];
begin
  s:=0;
  d:=0;
  for i:=1 to n do
    begin
      ch:=t[i];
      ch1:='';
      for j:=1 to length(ch) do
        if ch[j] in ['0'..'9'] then
          ch1:=ch1+ch[j];
        if ch=' ' then d:=0
        else
          val(ch1,d,e);
        s:=s+d;
      end;
    somme:=s;
  end;
procedure affiche(x:integer);
begin
  writeln('La somme des element du tableau t est: ',x);
end;
begin
  remplir(t,n);
  s:=somme(t,n);
  affiche(s);
end.
```

```
program bac_p19052009_14h;
uses wincrt;
var
ch,res:string;
function test(ch:string):boolean;
var
j:integer;
verif:boolean;
begin
j:=1;
verif:=true;
while verif and (j<=length(ch)) do
begin
if(ch[j] in ['A'..'Z','a'..'z'] ) and (length(ch) in [1..50] )
then j:=j+1
else verif:=false;
end;
test:=verif;
end;
procedure remplire(var ch:string);
var
i:integer;
begin
repeat
write('donner la chaine : ');
readln(ch);
until(test(ch));
end;

procedure former(var res:string;ch:string);
var
i:integer;
conmaj,conmin,voymaj,voymin:string;
begin
res:='';
conmaj:='';conmin:='';voymaj:='';voymin:='';
for i:=1 to length(ch) do
begin
{-----Méthode 1-----}
if(ch[i] in ['A'..'Z']) then
begin
if (ch[i] in ['A','E','U','O','I','Y']) then
voymaj:=voymaj+ch[i]
else
conmaj:=conmaj+ch[i];
end;
if(ch[i] in ['a'..'z']) then
begin
if (ch[i] in ['a','e','u','o','i','y']) then
voymin:=voymin+ch[i]
else
conmin:=conmin+ch[i];
end;
{-----Méthode2-----}
{case ch[i] of
'A'..'Z': if not(ch[i] in ['A','E','U','O','I','Y'] ) then
conmaj:=conmaj+ch[i]
else
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                                voymaj:=voymaj+ch[i];
'a'..'z': if not(ch[i] in ['a','e','u','o','i','y']) then
                                conmin:=conmin+ch[i]
                                                else
                                voymin:=voymin+ch[i];
                                end; }
end;
res:=conmaj+voymaj+conmin+voymin;
end;
procedure affiche(x:string);

begin
writeln('La chaine RES est: ',x);
end;
begin
remplire(ch);
former(res,ch);
affiche(res);
end.

```

```
program bac_19052009_15H30;
uses wincrt;
type
tab=array[1..100] of char;
var
t:tab;
n,D,M,deb,fin,bloc:integer;
procedure saisie(var n,D,M:integer);
begin
  write('Veuillez saisir le nombre d'élément du tableau: ');
  readln(n);
  write('Veuillez saisir l'entier D: ');
  readln(D);
  M:=n div D;
  writeln('M:=',M);
end;
procedure remplir(var tab;var n,D,M:integer);
var
i:integer;
begin
  repeat
    saisie(n,D,M);
  until(n in [6..100]) and (n mod D =0) and (D>1);
  for i:=1 to n do
    begin
      repeat
        write('donner l'element n°',i,': ');
        readln(t[i]);
        until(t[i] in ['a'..'z']);
      end;
    end;
end;

procedure affichage(t:tab;n:integer);
var
i:integer;
begin
  for i:=1 to n do
    writeln('t[' ,i,']= ',t[i]);
  end;
procedure permuter(var x,y:char);
var
aux:char;
begin
  aux:=x;
  x:=y;
  y:=aux;
end;
procedure trie(var v:tab;deb,fin:integer);
var
pos,j,i,min,bloc:integer;
begin
  for i:=deb to fin-1 do
    begin
      min:=ord(v[i]);
      for j:=i+1 to fin do
        begin
          if (ord(v[j])<min) then
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        begin
            min:=ord(v[j]);
            permuter(v[j],v[i]);
            end;
        end;
    end;
end;

procedure affectation(var D,M:integer;n:integer);
begin
end;
begin
    remplire(t,n,D,M);
    affichage(t,n); {permet d'afficher le tableau initial t}
    bloc:=1;
    while bloc<=M do
        begin
            deb:=(bloc-1)*D+1;
            fin:=D*bloc;
            trie(t,deb,fin);
            bloc:=bloc+1;
        end;
    affichage(t,n);
end.

```

# Corrigés Bac pratique Informatique

Sections Scientifiques(math, sciences et technique)

20 mai 2009 (9h, 14h)

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Mercredi 20 mai 2009 à 9h

```
program bac_20052009_9H;
uses wincrt;
type
tab=array[1..30] of string[5];
var
t:tab;
n:integer;
function saisie:integer;
var
n:integer;
begin
write('Veuillez saisir le nombre d'élément du tableau: ');
readln(n);
saisie:=n;
end;
procedure remplir(var tab;var n:integer);
var
i:integer;
begin
repeat
n:=saisie;
until(n in [2..30]);
for i:=1 to n do
begin
repeat
write('donner l'élément n°',i,': ');
readln(t[i]);
until(length(t[i])<=5);
end;
end;
procedure affichage(t:tab;n:integer);
var
i:integer;
begin
for i:=1 to n do
writeln('t[' ,i,']= ',t[i]);
end;
procedure elimine(var t:tab;n:integer);
var
i,j:integer;
ch:string[5];
begin
for i:=1 to n do
begin
ch:=t[i];
j:=1;
while j<=length(ch) do
begin
if ch[j] in ['a'..'z','A'..'Z'] then j:=j+1
else
delete(ch,j,1);
end;
t[i]:=ch;
```

Correction proposée par  
Mr BenHmida Haythem



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    end;
end;
procedure conv_maj(var t:tab;n:integer);
var
i,j:integer;
ch:string[5];
begin
    ch:='';
    for i:=1 to n do
        begin
            ch:=t[i];
            for j:=1 to length(ch) do
                if ch[j] in ['a'..'z'] then
                    ch[j]:=upcase(ch[j]);

                    t[i]:=ch;
                end;
            end;
        end;
end;
function verif(ch:string):boolean;
var
i,l:integer;
res:boolean;
begin
    l:=length(ch);
    res:=true;
    i:=1;
    while (i<=l div 2) and res do
        begin
            if ch[i]=ch[l-i+1] then i:=i+1
            else
                res:=false;
            end;
        end;
    verif:=res;
end;
procedure affiche_pal(t:tab;n:integer);
var
i,j:integer;
test:boolean;
ch:string[5];
begin
    writeln;
    for i:=1 to n do
        begin
            ch:=t[i];
            if verif(ch) then writeln(ch);
        end;
    end;
end;
begin
    remplire(t,n); {permet de remplir le tableau t}
    affichage(t,n); {permet d'afficher le tableau initial t}
    elimine(t,n);    {élimine les éléments non alphabétiques de t}

    conv_maj(t,n); {conversion des chaines non vide de t en Maj}
    affiche_pal(t,n); {affichage des chaines palindromique de t}
end.

```

```

program bac_p20052009_14h;
uses wincrt;
var ch,res:string;
function test(ch:string):boolean;
var
  j:integer;
  verif:boolean;
begin
  j:=1;
  verif:=true;
while verif and (j<=length(ch)) do
  begin
    if(ch[j] in ['A'..'Z','a'..'z'] ) and (length(ch) in [1..50] )
      then j:=j+1
    else
      verif:=false;
end;
  test:=verif;
end;
procedure remplire(var ch:string);
var
  i:integer;
begin
  repeat
    write('donner la chaine : ');
    readln(ch);
  until (test(ch));
end;
procedure former(var res:string;ch:string);
var i,j,cp:integer;
    temp,ch1:string;
begin
  i:=1;
  temp:='';
  res:='';
  while i<=(length(ch)-1) do
  begin
    ch1:='';
    temp:=ch[i];
    cp:=1;
    j:=i+1;
    while (ch[j]=temp) and (j<=length(ch)) do
    begin
      cp:=cp+1;
      j:=j+1;
    end;
    i:=j;
    str(cp,ch1);
    res:=res+ch1+temp;
  end;
end;
procedure affiche(x:string);
begin
  writeln('La chaine RES est: ',x);
end;
begin
  remplire(ch);
  former(res,ch);
  affiche(res);
end.

```

Mercredi 20 mai 2009 à 14h

Correction proposée par  
Mr BenHmida Haythem