

Corrigés Bac pratique Informatique

Sections Scientifiques (math, sciences et technique)

25 mai 2010 8h30

```
program bac2010_25Mai_8h30;
```

```
uses wincrt;
```

```
function kapecar(n:longint):boolean;
```

```
var l1,l,i,e:integer;
```

```
    x,c1,c2:longint;
```

```
    cc,c,ch,ch1:string;
```

```
begin
```

```
    x:=sqr(n);
```

```
    str(x,ch1);
```

```
    str(n,ch);
```

```
    l:=length(ch);
```

```
    l1:=length(ch1);
```

```
    c:="";
```

```
    for i:=l1 downto l1-l+1 do c:=ch1[i]+c;
```

```
    val(c,c1,e);
```

```
    cc:="";
```

```
    for i:=1 to l1-l do cc:=cc+ch1[i];
```

```
    val(cc,c2,e);
```

```
    if(c1+c2=n) then kapecar:=true
```

```
    else kapecar:=false;
```

```
end;
```

```
    {***** le programme principal *****}
```

```
VAR
```

```
i:integer;
```

```
BEGIN
```

```
for i:=1 to 1000 do
```

```
    if (kapecar(i)) then writeln(i);
```

```
END.
```

Corrigés Bac pratique Informatique

Sections Scientifiques (math, sciences et technique)

25 mai 2010 10h

```
program bac2010_25Mai_10h;
```

```
uses wincrt;
```

```
procedure saisie(var n:longint);
```

```
begin
```

```
  repeat
```

```
    write(' N = ');
```

```
    readln(n)
```

```
  until(n > 10);
```

```
end;
```

```
function divisible7(n:longint):integer;
```

```
var
```

```
ch:string;
```

```
n1,s:longint;
```

```
e,d,l,i:integer;
```

```
begin
```

```
  repeat
```

```
    str(n,ch);
```

```
    l:=length(ch);
```

```
    val(ch[l],d,e);
```

```
    delete(ch,l,1);
```

```
    val(ch,n,e);
```

```
    s:=abs(n-(2*d));
```

```
    writeln(n,'- 2*',d,'=',s);
```

```
    n:=s;
```

```
  until(s div 10 = 0);
```

```
  divisible7:=s;
```

```
end;
```

```
      {***** le programme principal *****}
```

```
var
```

```
n:longint;  x:integer;
```

```
begin
```

```
  saisie(n);
```

```
  x:= divisible7(n);
```

```
    if (x in [0,7] ) then writeln('le nombre ',n,' est divisible par 7')
```

```
    else writeln('le nombre ',n,' n'est pas divisible par 7');
```

```
end.
```

Correction proposée par
Sonia SAHLI

Corrigés Bac pratique Informatique

Sections Scientifiques (math, sciences et technique)

25 mai 2010 14h

```
program bac2010_25Mai_14h;
uses wincrt;
function puiss (n:integer;k:integer):integer;
var
p,i:integer;
begin
p:=1;
  for i:=1 to k do p:=p*n;
puiss:=p;
end;

function verif( n:integer):boolean;
var
ch:string;
d,e,s,i,j:integer;

begin
str(n,ch);
j:=1;
  repeat
    s:=0;
    for i:=1 to length(ch) do
      begin
        val(ch[i],d,e);
        s:=s+puiss(d,j);
      end;
    j:=j+1;
  until(j>5) or (s=n);
  if s=n then verif:=true
  else verif:=false;
end;

      {***** le programme principal *****}

Var   i:integer;
Begin
  writeln ('----- les chiffres qui vérifient la condition sont: -----');
  for i:= 1000 to 9999 do
    if (verif(i)) then writeln(i);
End.
```

Correction proposée par
Sonia SAHLI

Corrigés Bac pratique Informatique

Sections Scientifiques (math, sciences et technique)

25 mai 2010 15h30

```
program bac2010_25Mai_15h30;
```

```
uses wincrt;
```

```
procedure saisie (var ch:string);
```

```
var
```

```
  i:integer;
```

```
  ch1:string;
```

```
begin
```

```
  repeat
```

```
    writeln('entrer une chaine non vide :');
```

```
    readln(ch);
```

```
      ch:="";
```

```
      for i:= 1 to length(ch) do
```

```
        begin
```

```
          if(ch[i] in ['A'..'Z']) then ch1:=ch1+ch[i];
```

```
        end;
```

```
      until(ch<>'') and (ch=ch1);
```

```
end;
```

```
function rang(c:char):integer;
```

```
var r:integer;
```

```
begin
```

```
  case c of
```

```
    'A': r:=1;
```

```
    'E': r:=5;
```

```
    'I': r:=9;
```

```
    'O': r:=15;
```

```
    'U': r:=21;
```

```
    'Y': r:=25;
```

```
  end;
```

```
  rang:=r;
```

```
end;
```

```
function poid(ch:string):integer;  
var p,i:integer;  
begin  
  p:=0;  
  for i:=1 to length(ch) do  
    if (ch[i] in ['A','E','I','O','U','Y'])then p:=p+(i*rang(ch[i]));  
  poid:=p;  
end;
```

{***** le programme principal *****}

```
Var  
ch:string;  
Begin  
saisie(ch);  
writeln('le poid = ', poid(ch));  
End.
```