

Correction du TD n°5

Exercice 1 :

```
program de_bizarre;
const n1=4;
const n2=8;
const n=15;
var i:integer;

function
lancer(p,q:integer):integer;
BEGIN
lancer:=random(q-p+1)+p;
END;

BEGIN
randomize;
for i:=1 to n do
writeln(lancer(n1,n2));
readln;
END.
```

Exercice 2 :

```
program bernoulli;
var p:real;
    n,j:integer;

function ber(q:real):integer;
var r:real;
BEGIN
r:=random;
if r<q then ber:=1
    else ber:=0;
END;

function
som(m:integer;q:real):integer;
var i,s:integer;
BEGIN
s:=0;
for i:=1 to m do
    s:=s+ber(q);
som:=s;
END;
```

```
BEGIN
randomize;
write('p? n? ');
readln(p,n);
for j:=1 to 10 do
writeln(som(n,p));
readln;
END.
```

Exercice 3 :

```
program concours;
type tab=array[1..100]of
integer;
var t,N:tab;
    i,nb:integer;
BEGIN
randomize;
write('nb? ');
readln(nb);
N[1]:=1;
t[1]:=random(2);
writeln(1, ' ',t[1], ' ',N[1]);
for i:=2 to nb do
    BEGIN
t[i]:=random(2);
if t[i]=t[i-1] then
N[i]:=N[i-1]
    else N[i]:=N[i-1]+1;
writeln(i, ' ',t[i], ' ',N[i]);
    END;
readln;
END.
```

Exercice 4 :

```
program les_boules;
const n=20;
var i,r:integer;
BEGIN
randomize;
for i:=1 to n do
    BEGIN
r:=random(37);
if r<23 then writeln(i,'b')
else if r>34 then writeln(i,'v')
    else writeln(i,'j');
    END;
readln;
END.
```