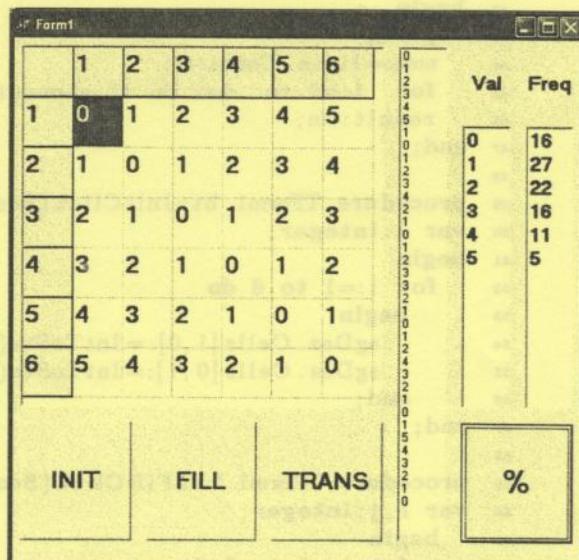


CORRIGÉ**Interface graphique :**8 points**Programmation :**

- | | |
|----------|-----------------|
| 1. INIT | <u>2 points</u> |
| 2. FILL | <u>4 points</u> |
| 3. TRANS | <u>8 points</u> |
| 4. % | <u>4 points</u> |
- 18 points

**Vérification :**4 points**MAIN.PAS**

```

1 unit main;
2 interface
3 uses
4   Windows, Messages, SysUtils, Variants, Classes, Graphics, Controls, Forms,
5   Dialogs, StdCtrls, Grids;
6 type
7   TForm1 = class(TForm)
8     sgDes: TStringGrid;
9     btnFill: TButton;
10    lbValeurs: TListBox;
11    lbAll: TListBox;
12    lbFreq: TListBox;
13    btnFreq: TButton;
14    btnInit: TButton;
15    btnTrans: TButton;
16    lblValeurs: TLabel;
17    lblFreq: TLabel;
18    procedure btnFillClick(Sender: TObject);
19    procedure btnFreqClick(Sender: TObject);
20    procedure btnInitClick(Sender: TObject);
21    procedure btnTransClick(Sender: TObject);
22 private
23   { Private declarations }
24 public
25   { Public declarations }
26 end;
27 var
28   Form1: TForm1;
29 implementation
30 {$R *.dfm}
31
32 function notinliste(element:string; liste:Tlistbox):boolean;
33 var i,max:integer;
34 begin
35   max:=liste.Count-1;
36   result:=true;
37   for i:=0 to max do if element=liste.Items[i]then result:=false;
38 end;
39

```

```
40 function frequence(element:string; liste:Tlistbox):integer;
41 var n,i,max:integer;
42 begin
43     n:=0;
44     max:= liste.Count-1;
45     for i:=0 to max do if element=liste.Items[i]then n:=n+1;
46     result:=n;
47 end;
48
49 procedure TForm1.btnAddClick(Sender: TObject);
50 var i:integer;
51 begin
52     for i:=1 to 6 do
53         begin
54             sgDes.Cells [i,0]:= IntToStr(i);
55             sgDes.Cells [0,i]:= IntToStr(i);
56         end;
57 end;
58
59 procedure TForm1.btnAddClick(Sender: TObject);
60 var i,j:integer;
61 begin
62     for i:=1 to 6 do
63         for j:=1 to 6 do
64             sgDes.Cells [i,j]:= FloatToStr(abs
65             (StrtoFloat(sgDes.Cells [i,0])- StrtoFloat(sgDes.Cells [0,j]))));
66 end;
67
68 procedure TForm1.btnAddClick(Sender: TObject);
69 var i,j:integer; cellule:string;
70 begin
71     lbAll.Clear;lbValeurs.Clear;
72     for i:=1 to 6 do
73         for j:=1 to 6 do
74             begin
75                 cellule:= sgDes.Cells [i,j];
76                 lbAll.Items.Append(cellule);
77                 if notinliste(cellule,lbValeurs)then lbValeurs.Items.Append(cellule);
78             end;
79 end;
80
81 procedure TForm1.btnAddClick(Sender: TObject);
82 var i:integer;
83 begin
84     lbFreq.Clear;
85     for i:=0 to lbValeurs.Count-1 do
86         lbFreq.Items[i]:= IntToStr(100*frequence(lbValeurs.Items[i],lbAll)div lbAll.Count);
87 end;
88 end.
```