

```
1: unit Unit1;
2:
3: interface
4:
5: uses
6:   Windows, Messages, SysUtils, Variants, Classes, Graphics, Controls, Forms,
7:   Dialogs, StdCtrls, Grids;
8:
9: type
10:   TForm1 = class(TForm)
11:     StringGrid1: TStringGrid;
12:     ListBox1: TListBox;
13:     Button1: TButton;
14:     Button2: TButton;
15:     Edit1: TEdit;
16:     Button3: TButton;
17:     Label1: TLabel;
18:     Button4: TButton;
19:     procedure Button1Click(Sender: TObject);
20:     procedure Button2Click(Sender: TObject);
21:     procedure Button4Click(Sender: TObject);
22:     procedure Button3Click(Sender: TObject);
23:   private
24:     { Private declarations }
25:   public
26:     { Public declarations }
27:   end;
28:
29: var
30:   Form1: TForm1;
31:
32: implementation
33:
34: {$R *.dfm}
35: function element (var liste:TListBox; n : integer):boolean;
36: var i:Integer;
37: begin
38: result:=false;
39: i:=0;
40: while (i<liste.Items.count) and (liste.Items[i]<>inttostr(n)) do
41:   i:=i+1;
42: result:=(i<liste.Items.count);
43: end;
44: procedure TForm1.Button1Click(Sender: TObject);
45: var i,j :integer;
46: begin
47: listbox1.Items.clear;
48: for i:=0 to stringgrid1.rowcount-1 do
49:   for j:=0 to stringgrid1.colcount-1 do
50:     stringgrid1.Cells[j,i]='';
51:
52: for i:=0 to stringgrid1.rowcount-1 do
53:   begin
54:     stringgrid1.Cells[0,i]='1';
55:     stringgrid1.Cells[i+1,i]='1';
56:     for j:=1 to i do
57:
58:       stringgrid1.Cells[j,i]:=IntToStr(strtoint(stringgrid1.Cells[j-1,i-1])+strtoint(stringgrid1.
59: Cells[j,i-1]));
60:     end;
61:
62: procedure TForm1.Button2Click(Sender: TObject);
63: var n,i,j:integer;
64: begin
65: n:=StrToInt(edit1.Text);
66: for i:=0 to stringgrid1.rowcount-1 do
67:   for j:=0 to i+1 do
68:     if Strtoint(stringgrid1.Cells[j,i]) mod n =0 then stringgrid1.Cells[j,i]='';
69: end;
70:
71: procedure TForm1.Button4Click(Sender: TObject);
72: var somme, i,j:integer;
73: begin
74: listbox1.items.clear;
75: for i:=0 to stringgrid1.rowcount-1 do
```



```
76:      begin
77:      somme:=0;
78:      for j:=0 to i+1 do
79:      if stringgrid1.Cells[j,i]<>' ' then somme:=somme+Strtoint(stringgrid1.Cells[j,i]);
80:      listbox1.items.add(inttostr(somme));
81:      end;
82:
83: end;
84:
85: procedure TForm1.Button3Click(Sender: TObject);
86: var nombre,i,impair,carre:integer;
87: begin
88: nombre:=0;
89: carre:=0;
90: impair:=1;
91: for i:=0 to 5792 do
92:   begin
93:   if element(listbox1,carre) then nombre :=nombre+1;
94:   carre:=carre+impair;
95:   impair:=impair+2;
96:   end;
97: {ou
98: for i:=0 to 5792 do
99:   if element(listbox1,sqr(i)) then nombre:=nombre+1;   }
100:   labell.Caption:=inttostr(nombre);
101: end;
102:
103: end.
```