

```

1: PROGRAM Demo_App_Visitor_Object_Pattern_Short;
2: //see also _55 factory ,loc's=88
3:
4: CONST
5:   TEXTOUT = 'hi world of visitors'+#13#10;
6:
7: Type
8:   //TPerson = TStringlist; to add an object
9:   TPerson = record
10:     aname: shortstring;
11:     place: shortstring;
12:   end;
13:
14:   TPersons = TStringlist;
15:   TPersonOperation = Procedure(P: TPersons); //to show for each operator
16:
17: var
18:   //fperson: TPersons; //aPerson: TPerson;
19:   i: byte;
20:   plist: TObjectList;
21:
22: procedure AddPersons(vlist: TObjectList);
23: var i: byte;
24:     fPerson: TPersons;
25: begin
26:   for i:= 1 to 5 do begin
27:     fPerson:= TPersons.Create;
28:     with fPerson do begin
29:       //add persons
30:       text:= 'Person'+inttoStr(i);
31:       vlist.add(fPerson);
32:     end;
33:   end;
34:   //fPerson.Free; to show last object has gone
35: end;
36:
37: PROCEDURE TForm1_CapitalizeNames(vlist: TObjectlist);
38: VAR I: INTEGER;
39: BEGIN
40:   FOR I:= 0 TO vList.Count - 1 DO
41:     WITH TPersons(vlist[i]) DO
42:       Text:= UpperCase(Text);
43:   END;
44:
45: PROCEDURE TForm1_ListObjects(vlist: TObjectlist);
46: VAR I: INTEGER;
47: BEGIN
48:   FOR I:= 0 TO vList.Count - 1 DO
49:     Write(TPersons(vlist[i]).text);
50:   END;
51:
52: //-----with foreach operator-----
53: PROCEDURE ForeachPerson(Op: TPersonOperation; vlist: TObjectlist);
54: VAR I: INTEGER;
55: BEGIN
56:   FOR I:= 0 TO vList.Count-1 DO Op(TPersons(vList[i]));
57: END;
58:
59: PROCEDURE CapitalizePerson(P: TPersons); //procedure type
60: BEGIN
61:   P.Text:= UpperCase(P.Text); //test with lowerCase
62: END;
63:
64: PROCEDURE TForm1_Capitalize_ForEach(vlist: TObjectList);
65: BEGIN
66:   ForeachPerson(@CapitalizePerson, vlist);
67: END;
68:
69:
70: BEGIN //Main
71: //<Executable statements>
72:   plist:= TObjectList.create;
73:   AddPersons(plist)
74:   for i:= 0 to plist.count -1 do
75:     Write(TPersons(plist[i]).text);
76:     Writeln('Now the CAPITALIZE: ')
77:     TForm1_CapitalizeNames(plist);
78:     TForm1_ListObjects(plist);
79:     // foreach operator
80:     Writeln('foreach operator: ')
81:     TForm1_Capitalize_ForEach(plist);
82:     TForm1_ListObjects(plist);
83:     write(TPersons(plist[0]).text)
84:     //Test Function
85:     Assert2(TPersons(plist[0]).text='PERSON1'+#13#10,'Must capitalized')
86:     plist.Free;
87: //<Definitions>
88: END.
89: -----

```