LAMPIRAN

```
Program Pembentukan_Bujur_Sangkar_Latin_Ortogonal;
(*=============================================================*)
(*      Program Mencari Bujur Sangkar Latin Saling Ortogonal    *)
(*     dan Membentuknya Menjadi Bujur Sangkar Latin Ortogonal   *)
(*                          Order n < 10                       *)
(*                  Khusus untuk n Pangkat prime               *)
(*=============================================================*)
Uses crt;
Const
 Max = 9;
Type
 TMatrix = array [1..max,1..max] of byte;
Var
 Matrix : array [1..max] of TMatrix;
 Pair_matrix : array[1..((max-1)*(max-2)),1..max,1..max,1..2] of byte;
 Col,Row,Max_Col,Max_Row,Count,Now,Pos : byte;
 Order : integer;
 OutFile : text;
Begin
 Assign(OutFile,'andi.txt');
 Rewrite(OutFile);
Clrscr;
 Textcolor(5+Blink);
 Textbackground(0);
 Window(10,2,80,25);
 Count := 1;
Write('Entry Order Matrix Latin Square = ');readln(order);
 Write('Entry Number Row    = ');readln(max_row);
 Write('Entry Number Column = ');readln(max_col);
 writeln(OutFile,'Entry Order Matrix Latin Square = ',order);
 Writeln(OutFile,'Entry Number Row    = ',max_row);
 Writeln(OutFile,'Entry Number Column = ',max_col);
 Writeln(OutFile);
 Writeln;
 Textcolor(4);
  For Row := 1 to Max_Row do
```

```
  For Col := 1 to Max_Col do
  Begin
   Write('M[',Row,',',Col,'] = ');
   Readln(Matrix[Count,Row,Col]);
  End;
For count := 2 to Max_Row do
  For col := 1 to Max_Col do
   Matrix[count,1,col] := matrix[1,1,col];
 Count := 2;
 Repeat
  For col := 1 to max_col do
   Matrix[count,max_row,col] := matrix[count-1,2,col];
  For row := 3 to max_row do
   For col := 1 to max_row do
    Matrix[count,row-1,col] := matrix[count-1,row,col];
  Inc(count);
 Until count = max_row;
 For count := 1 to max_row-1 do
 Begin
  For row := 1 to max_row do
  Begin
   For col := 1 to max_col do
   Begin
    Write(matrix[count,row,col]:3,' ');
    Write(OutFile,matrix[count,row,col]:3,' ');
   End;
   Writeln;
   Writeln(OutFile);
  End;
  Writeln;
  Writeln(OutFile);
 End;
 Writeln(OutFile);
 Writeln(OutFile,'======================================== ');
 Writeln(OutFile,'Pembentukan Bujur Sangkar Latin Ortogonal ');
 Writeln(OutFile,'             Order n < 10                 ');
 Writeln(OutFile,'        Khusus n Pangkat Prime            ');
 Writeln(OutFile,'======================================== ');
```

```
 Writeln(OutFile);
Pos := 1;
 For now := 1 to max_row-1 do
  For count := 1 to max_row-1 do
   If now <> count then
   Begin
    For row := 1 to max_row do
     For col := 1 to max_col do
     Begin
      Pair_matrix[pos,row,col,1] := matrix[now,row,col];
      Pair_matrix[pos,row,col,2] := matrix[count,row,col];
     End;
    Inc(pos);
   End;
 For pos := 1 to (max_row-1)*(max_row-2) do
 Begin
  For row := 1 to max_row do
  Begin
   For col := 1 to max_col do
   Begin
    Write(pair_matrix[pos,row,col,1],',',pair_matrix[pos,row,col,2],' ');
Write(OutFile,pair_matrix[pos,row,col,1],',',pair_matrix[pos,row, col,2],'');
   End;
   Writeln;
   Writeln(OutFile);
  End;
  Writeln;
  Writeln(OutFile);
 End;
 Close(OutFile);
End.
```