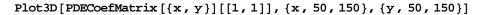
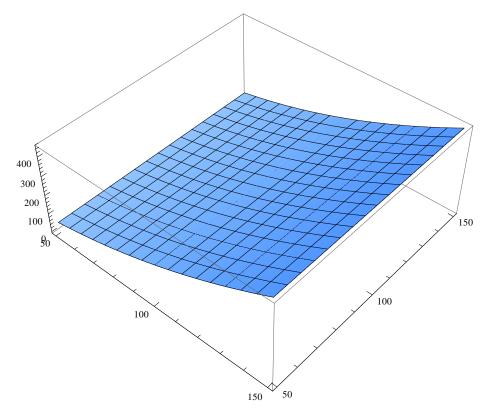
```
<< Combinatorica ;
             General::compat:
                 Combinatorica Graph and Permutations functionality has been superseded by preloaded
                         functionally. The package now being loaded may conflict
                         with this. Please see the Compatibility Guide for details.
             n = 5;
             DerivativeOrder = 3;
             StencilType = 1;
             (*Stencil Points*)
             StencilPoints = GenStencilPoints[n, StencilType];
             sys = {StencilPoints, DerivativeOrder, n};
              (*Plot Stencil
               If [n=2,ListPlot [Append [StencilPoints, Table [0, {i,n}]], PlotMarkers → Automatic]]
               If [n== 3, ListPointPlot3D [
                      \label{eq:append} Append [StencilPoints, Table [0, \{i, n\}]], PlotStyle \rightarrow PointSize [Medium]]] \star) 
             StencilPoints
             (*Result*)
             {a, res} = GenWeights[sys]
             CheckWeights[res, sys] // N
             \{\{1,0,0,0,0\},\{-1,0,0,0,0\},\{0,1,0,0,0\},\{0,-1,0,0,0\},\{0,0,1,0,0\},
                \{0, 0, -1, 0, 0\}, \{0, 0, 0, 1, 0\}, \{0, 0, 0, -1, 0\}, \{0, 0, 0, 0, 1\}, \{0, 0, 0, 0, -1\},
               \{1, 1, 0, 0, 0\}, \{-1, -1, 0, 0, 0\}, \{1, 0, 1, 0, 0\}, \{-1, 0, -1, 0, 0\}, \{1, 0, 0, 1, 0\},
                \{-1, 0, 0, -1, 0\}, \{1, 0, 0, 0, 1\}, \{-1, 0, 0, 0, -1\}, \{0, 1, 1, 0, 0\}, \{0, -1, -1, 0, 0\},
                \{0, 1, 0, 1, 0\}, \{0, -1, 0, -1, 0\}, \{0, 1, 0, 0, 1\}, \{0, -1, 0, 0, -1\}, \{0, 0, 1, 1, 0\},
                \{0, 0, -1, -1, 0\}, \{0, 0, 1, 0, 1\}, \{0, 0, -1, 0, -1\}, \{0, 0, 0, 1, 1\}, \{0, 0, 0, -1, -1\}\}
             \{0.0409433, \{3700.8, 3672., 3700.8, 3672., 3700.8, 3672., 3700.8, 3672., 3700.8, 3672., 3700.8, 3672., 3700.8, 3672., 3700.8, 3672., 3700.8, 3672., 3700.8, 3672., 3700.8, 3672., 3700.8, 3672., 3700.8, 3672., 3700.8, 3672., 3700.8, 3672., 3700.8, 3672., 3700.8, 3672., 3700.8, 3672., 3700.8, 3672., 3700.8, 3672., 3700.8, 3672., 3700.8, 3672., 3700.8, 3672., 3700.8, 3672., 3700.8, 3672., 3700.8, 3672., 3700.8, 3672., 3700.8, 3672., 3700.8, 3672., 3700.8, 3672., 3700.8, 3672., 3700.8, 3672., 3700.8, 3672., 3700.8, 3672., 3700.8, 3672., 3700.8, 3672., 3700.8, 3672., 3700.8, 3672., 3700.8, 3672., 3700.8, 3672., 3700.8, 3672., 3700.8, 3672., 3700.8, 3672., 3700.8, 3672., 3700.8, 3672., 3700.8, 3672., 3700.8, 3672., 3700.8, 3672., 3700.8, 3672., 3700.8, 3672., 3700.8, 3672., 3700.8, 3672., 3700.8, 3672., 3700.8, 3672., 3700.8, 3672., 3700.8, 3672., 3700.8, 3672., 3700.8, 3672., 3700.8, 3672., 3700.8, 3672., 3700.8, 3672., 3700.8, 3672., 3700.8, 3672., 3700.8, 3672., 3700.8, 3672., 3700.8, 3672., 3700.8, 3672., 3700.8, 3672., 3700.8, 3672., 3700.8, 3672., 3700.8, 3672., 3700.8, 3672., 3700.8, 3672., 3700.8, 3672., 3700.8, 3672., 3700.8, 3672., 3700.8, 3672., 3700.8, 3672., 3700.8, 3672., 3700.8, 3672., 3700.8, 3672., 3700.8, 3672., 3700.8, 3672., 3700.8, 3672., 3700.8, 3672., 3700.8, 3672., 3700.8, 3672., 3700.8, 3672., 3700.8, 3672., 3700.8, 3672., 3700.8, 3672., 3700.8, 3672., 3700.8, 3672., 3700.8, 3672., 3700.8, 3672., 3700.8, 3672., 3700.8, 3672., 3700.8, 3672., 3700.8, 3672., 3700.8, 3672., 3700.8, 3672., 3700.8, 3672., 3700.8, 3672., 3700.8, 3672., 3700.8, 3672., 3700.8, 3672., 3700.8, 3672., 3700.8, 3672., 3700.8, 3672., 3700.8, 3672., 3700.8, 3672., 3700.8, 3672., 3700.8, 3672., 3700.8, 3672., 3700.8, 3672., 3700.8, 3672., 3700.8, 3672., 3700.8, 3672., 3700.8, 3672., 3700.8, 3672., 3700.8, 3672., 3700.8, 3672., 3700.0, 3700.0, 3700.0, 3700.0, 3700.0, 3700.0, 3700.0, 3700.0, 3700.0, 3700.0, 3700.0, 3700.0, 3700.0, 3700.0, 3700.0, 3700.0, 3700.0, 3700.0, 3700.0, 3700.0, 3700.0, 3700.0, 3700.0, 3700.0, 3700.0, 3
                  3686.4, 3686.4, 3686.4, 3686.4, 3686.4, 3686.4, 3686.4, 3686.4, 3686.4, 3686.4,
                  3686.4, 3686.4, 3686.4, 3686.4, 3686.4, 3686.4, 3686.4, 3686.4, 3686.4, 3686.4)
Norm: 0.0409433
LS-Norm: 0.0409433
             {3700.8, 3672., 3700.8, 3672., 3700.8, 3672., 3700.8, 3672., 3700.8, 3672.,
               3686.4, 3686.4, 3686.4, 3686.4, 3686.4, 3686.4, 3686.4, 3686.4, 3686.4,
                3686.4, 3686.4, 3686.4, 3686.4, 3686.4, 3686.4, 3686.4, 3686.4, 3686.4, 3686.4
```





a = PDECoefMatrix[{x,y}]

$$\{\{0.02 x^2, 0.018 x y\}, \{0.018 x y, 0.02 y^2\}\}$$

StencilPoints

$$\{\{1\,,\,0\}\,,\,\{-1\,,\,0\}\,,\,\{0\,,\,1\}\,,\,\{0\,,\,-1\}\,,\,\{1\,,\,1\}\,,\,\{-1\,,\,-1\}\}$$

w =.

nn = 100;

{res, wei} = GenDiagonals[sys, w];

Max[res]

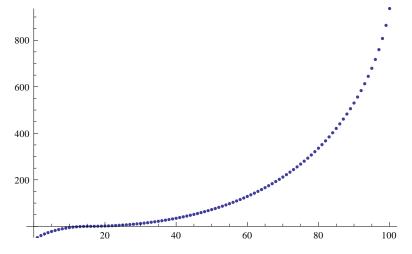
1.60379

m = SplitOperator [wei, 1, 2, StencilPoints[[1]], indices]; m // MatrixForm

A very large output was generated. Here is a sample of it: $(\ll 1 \gg)$ Show Less Show More Show Full Output Set Size Limit...

```
q = m[[80, 2]]; t = SparseArray[{\{i_, j_\} /; Abs[i - j] \le 1 \Rightarrow q[[i, j - i + 2]]\}, {nn, nn}];
t // MatrixForm;
```

ListPlot[#, PlotRange → {Min[0, Min[#]], Max[#]}] &[Sort[-Eigenvalues[t]]]



m = SplitOperator [wei, 3, 4, StencilPoints[[3]], indices]; m // MatrixForm

```
\{1, 1\}
                                                                                                                                                                                                                                                    \{\{0.359677, -0.73, 0.360323\}, \{0.559623, -1.13, 0.560377\}, \{0.79957, -1.61, 0.79957, -1.61\}
           {2,1}
                                                                                                                                                                                                                                    \{(0.299677, -0.61, 0.300323\}, \{0.489623, -0.99, 0.490377\}, \{0.71957, -1.45, 0.489623, -0.99, 0.490377\}, \{0.71957, -1.45, 0.489623, -0.99, 0.490377\}, \{0.71957, -1.45, 0.489623, -0.99, 0.490377\}, \{0.71957, -1.45, 0.489623, -0.99, 0.490377\}, \{0.71957, -1.45, 0.489623, -0.99, 0.490377\}, \{0.71957, -1.45, 0.489623, -0.99, 0.490377\}, \{0.71957, -1.45, 0.489623, -0.99, 0.490377\}, \{0.71957, -1.45, 0.489623, -0.99, 0.490377\}, \{0.71957, -1.45, 0.489623, -0.99, 0.490377\}, \{0.71957, -1.45, 0.489623, -0.99, 0.490377\}, \{0.71957, -1.45, 0.489623, -0.99, 0.490377\}
                                                                                                                                                                                                                                    \{\{0.239677, -0.49, 0.240323\}, \{0.419623, -0.85, 0.420377\}, \{0.63957, -1.29, 0.420377\}, \{0.63957, -1.29, 0.420377\}, \{0.63957, -1.29, 0.420377\}, \{0.63957, -1.29, 0.420377\}, \{0.63957, -1.29, 0.420377\}, \{0.63957, -1.29, 0.420377\}, \{0.63957, -1.29, 0.420377\}, \{0.63957, -1.29, 0.420377\}, \{0.63957, -1.29, 0.420377\}, \{0.63957, -1.29, 0.420377\}, \{0.63957, -1.29, 0.420377\}, \{0.63957, -1.29, 0.420377\}, \{0.63957, -1.29, 0.420377\}, \{0.63957, -1.29, 0.420377\}, \{0.63957, -1.29, 0.420377\}, \{0.63957, -1.29, 0.420377\}, \{0.63957, -1.29, 0.420377\}, \{0.63957, -1.29, 0.420377\}, \{0.63957, -1.29, 0.420377\}, \{0.63957, -1.29, 0.420377\}, \{0.63957, -1.29, 0.420377\}, \{0.63957, -1.29, 0.420377\}, \{0.63957, -1.29, 0.420377\}, \{0.63957, -1.29, 0.420377\}, \{0.63957, -1.29, 0.420377\}, \{0.63957, -1.29, 0.420377\}, \{0.63957, -1.29, 0.42037, 0.42037, 0.42037, 0.42037, 0.42037, 0.42037, 0.42037, 0.42037, 0.42037, 0.42037, 0.42037, 0.42037, 0.42037, 0.42037, 0.42037, 0.42037, 0.42037, 0.42037, 0.42037, 0.42037, 0.42037, 0.42037, 0.42037, 0.42037, 0.42037, 0.42037, 0.42037, 0.42037, 0.42037, 0.42037, 0.42037, 0.42037, 0.42037, 0.42037, 0.42037, 0.42037, 0.42037, 0.42037, 0.42037, 0.42037, 0.42037, 0.42037, 0.42037, 0.42037, 0.42037, 0.42037, 0.42037, 0.42037, 0.42037, 0.42037, 0.42037, 0.42037, 0.42037, 0.42037, 0.42037, 0.42037, 0.42037, 0.42037, 0.42037, 0.42037, 0.42037, 0.42037, 0.42037, 0.42037, 0.42037, 0.42037, 0.42037, 0.42037, 0.42037, 0.42037, 0.42037, 0.42037, 0.42037, 0.42037, 0.42037, 0.42037, 0.42037, 0.42037, 0.42037, 0.42037, 0.42037, 0.42037, 0.42037, 0.42037, 0.42037, 0.42037, 0.42037, 0.42037, 0.42037, 0.42037, 0.42037, 0.42037, 0.42037, 0.42037, 0.42037, 0.42037, 0.42037, 0.42037, 0.42037, 0.42037, 0.42037, 0.42037, 0.42037, 0.42037, 0.42037, 0.42037, 0.42037, 0.42037, 0.42037, 0.42037, 0.42037, 0.42037, 0.42037, 0.42037, 0.42037, 0.42037, 0.42037, 0.42037, 0.42037, 0.42037, 0.42037, 0.42037, 0.42037, 0.42037, 0.42037, 0.42037, 0.42037, 0.42037, 0.42037, 0.42037, 0.42037, 0.42037, 0.42037, 0.42037, 0.42037, 0.42037, 0.42037, 0.42037
             \{3, 1\}
         \{4, 1\}
                                                                                                                                                                                                                                    \{\{0.179677, -0.37, 0.180323\}, \{0.349623, -0.71, 0.350377\}, \{0.55957, -1.13, 0.95957, -1.13, 0.95957, -1.13, 0.95957, -1.13, 0.95957, -1.13, 0.95957, -1.13, 0.95957, -1.13, 0.95957, -1.13, 0.95957, -1.13, 0.95957, -1.13, 0.95957, -1.13, 0.95957, -1.13, 0.95957, -1.13, 0.95957, -1.13, 0.95957, -1.13, 0.95957, -1.13, 0.95957, -1.13, 0.95957, -1.13, 0.95957, -1.13, 0.95957, -1.13, 0.95957, -1.13, 0.95957, -1.13, 0.95957, -1.13, 0.95957, -1.13, 0.95957, -1.13, 0.95957, -1.13, 0.95957, -1.13, 0.95957, -1.13, 0.95957, -1.13, 0.95957, -1.13, 0.95957, -1.13, 0.95957, -1.13, 0.95957, -1.13, 0.95957, -1.13, 0.95957, -1.13, 0.95957, -1.13, 0.95957, -1.13, 0.95957, -1.13, 0.95957, -1.13, 0.95957, -1.13, 0.95957, -1.13, 0.95957, -1.13, 0.95957, -1.13, 0.95957, -1.13, 0.95957, -1.13, 0.95957, -1.13, 0.95957, -1.13, 0.95957, -1.13, 0.95957, -1.13, 0.95957, -1.13, 0.95957, -1.13, 0.95957, -1.13, 0.95957, -1.13, 0.95957, -1.13, 0.95957, -1.13, 0.95957, -1.13, 0.95957, -1.13, 0.95957, -1.13, 0.95957, -1.13, 0.95957, -1.13, 0.95957, -1.13, 0.95957, -1.13, 0.95957, -1.13, 0.95957, -1.13, 0.95957, -1.13, 0.95957, -1.13, 0.95957, -1.13, 0.95957, -1.13, 0.95957, -1.13, 0.95957, -1.13, 0.95957, -1.13, 0.95957, -1.13, 0.95957, -1.13, 0.95957, -1.13, 0.95957, -1.13, 0.95957, -1.13, 0.95957, -1.13, 0.95957, -1.13, 0.95957, -1.13, 0.95957, -1.13, 0.95957, -1.13, 0.95957, -1.13, 0.95957, -1.13, 0.95957, -1.13, 0.95957, -1.13, 0.95957, -1.13, 0.95957, -1.13, 0.95957, -1.13, 0.95957, -1.13, 0.95957, -1.13, 0.95957, -1.13, 0.95957, -1.13, 0.95957, -1.13, 0.95957, -1.13, 0.95957, -1.13, 0.95957, -1.13, 0.95957, -1.13, 0.95957, -1.13, 0.95957, -1.13, 0.95957, -1.13, 0.95957, -1.13, 0.95957, -1.13, 0.95957, -1.13, 0.95957, -1.13, 0.95957, -1.13, 0.95957, -1.13, 0.95957, -1.13, 0.95957, -1.13, 0.95957, -1.13, 0.95957, -1.13, 0.95957, -1.13, 0.95957, -1.13, 0.95957, -1.13, 0.95957, -1.13, 0.95957, -1.13, 0.95957, -1.13, 0.95957, -1.13, 0.95957, -1.13, 0.955757, -1.13, 0.95575, -1.13, 0.95575, -1.13, 0.95575, -1.13, 0.95575, -1.13, 0.95575, -1.13,
           {5, 1}
                                                                                                                                                                                                                               \{0.119677, -0.25, 0.120323\}, \{0.279623, -0.57, 0.280377\}, \{0.47957, -0.97, 0.280377\}, \{0.47957, -0.97, 0.280377\}, \{0.47957, -0.97, 0.280377\}, \{0.47957, -0.97, 0.280377\}, \{0.47957, -0.97, 0.280377\}, \{0.47957, -0.97, 0.280377\}, \{0.47957, -0.97, 0.280377\}, \{0.47957, -0.97, 0.280377\}, \{0.47957, -0.97, 0.280377\}, \{0.47957, -0.97, 0.280377\}, \{0.47957, -0.97, 0.280377\}, \{0.47957, -0.97, 0.280377\}, \{0.47957, -0.97, 0.280377\}, \{0.47957, -0.97, 0.280377\}, \{0.47957, -0.97, 0.280377\}, \{0.47957, -0.97, 0.280377\}, \{0.47957, -0.97, 0.280377\}, \{0.47957, -0.97, 0.280377\}, \{0.47957, -0.97, 0.280377\}, \{0.47957, -0.97, 0.280377\}, \{0.47957, -0.97, 0.280377\}, \{0.47957, -0.97, 0.280377\}, \{0.47957, -0.97, 0.280377\}, \{0.47957, -0.97, 0.280377\}, \{0.47957, -0.97, 0.280377\}, \{0.47957, -0.97, 0.280377\}, \{0.47957, -0.97, 0.280377\}, \{0.47957, -0.97, 0.280377\}, \{0.47957, -0.97, 0.280377\}, \{0.47957, -0.97, 0.280377\}, \{0.47957, -0.97, 0.280377\}, \{0.47957, -0.97, 0.280377\}, \{0.47957, -0.97, 0.280377\}, \{0.47957, -0.97, 0.280377\}, \{0.47957, -0.97, 0.280377\}, \{0.47957, -0.97, 0.280377\}, \{0.47957, -0.97, 0.280377\}, \{0.47957, -0.97, 0.28037, -0.97, 0.28037, -0.97, 0.28037, -0.97, 0.28037, -0.97, 0.28037, -0.97, 0.28037, -0.97, 0.28037, -0.97, 0.28037, -0.97, 0.28037, -0.97, 0.28037, -0.97, 0.28037, -0.97, 0.28037, -0.97, 0.28037, -0.97, 0.28037, -0.97, 0.28037, -0.97, 0.28037, -0.97, 0.28037, -0.97, 0.28037, -0.97, 0.28037, -0.97, 0.28037, -0.97, 0.28037, -0.97, 0.28037, -0.97, 0.28037, -0.97, 0.28037, -0.97, 0.28037, -0.97, 0.28037, -0.97, 0.28037, -0.97, 0.28037, -0.97, 0.28037, -0.97, 0.28037, -0.97, 0.28037, -0.97, 0.28037, -0.97, 0.28037, -0.97, 0.28037, -0.97, 0.28037, -0.97, 0.28037, -0.97, 0.28037, -0.97, 0.28037, -0.97, 0.28037, -0.97, 0.28037, -0.97, 0.28037, -0.97, 0.28037, -0.97, 0.28037, -0.97, 0.28037, -0.97, 0.28037, -0.97, 0.28037, -0.97, 0.28037, -0.97, 0.28037, -0.97, 0.28037, -0.97, 0.28037, -0.97, 0.28037, -0.97, 0.28037, -0.97, 0.28037, -0.97, 0.28037, -0.97, 0.28037, -0.97, 0.28037, -0.97, 0.28037, -0.97, 0.28037, -0.97, 0.280
             {6, 1}
                                                                                                                                                                                                   \{\{0.0596772, -0.13, 0.0603228\}, \{0.209623, -0.43, 0.210377\}, \{0.39957, -0.81, 0.43, 0.210377\}, \{0.39957, -0.81, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 0.41, 
                                                                                                                                                       \{\{-0.000322838, -0.01, 0.000322838\}, \{0.139623, -0.29, 0.140377\}, \{0.31957, -0.65\}\}
                                                                                                                                         \{\{-0.0603228, 0.11, -0.0596772\}, \{0.0696234, -0.15, 0.0703766\}, \{0.23957, -0.49, 0.15, 0.0703766\}, \{0.23957, -0.49, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.15, 0.
           \{8, 1\}
         \{9,1\} \{\{-0.120323,0.23,-0.119677\},\{-0.000376644,-0.01,0.000376644\},\{0.15957,-0.33\}\}
\{10,1\} \quad \{\{-0.180323,0.35,-0.179677\}, \{-0.0703766,0.13,-0.0696234\}, \{0.0795695,-0.17,0.17\}, \{0.0795695,-0.17\}, \{0.0795695,-0.17\}, \{0.0795695,-0.17\}, \{0.0795695,-0.17\}, \{0.0795695,-0.17\}, \{0.0795695,-0.17\}, \{0.0795695,-0.17\}, \{0.0795695,-0.17\}, \{0.0795695,-0.17\}, \{0.0795695,-0.17\}, \{0.0795695,-0.17\}, \{0.0795695,-0.17\}, \{0.0795695,-0.17\}, \{0.0795695,-0.17\}, \{0.0795695,-0.17\}, \{0.0795695,-0.17\}, \{0.0795695,-0.17\}, \{0.0795695,-0.17\}, \{0.0795695,-0.17\}, \{0.0795695,-0.17\}, \{0.0795695,-0.17\}, \{0.0795695,-0.17\}, \{0.0795695,-0.17\}, \{0.0795695,-0.17\}, \{0.0795695,-0.17\}, \{0.0795695,-0.17\}, \{0.0795695,-0.17\}, \{0.0795695,-0.17\}, \{0.0795695,-0.17\}, \{0.0795695,-0.17\}, \{0.0795695,-0.17\}, \{0.0795695,-0.17\}, \{0.0795695,-0.17\}, \{0.0795695,-0.17\}, \{0.0795695,-0.17\}, \{0.0795695,-0.17\}, \{0.0795695,-0.17\}, \{0.0795695,-0.17\}, \{0.0795695,-0.17\}, \{0.0795695,-0.17\}, \{0.0795695,-0.17\}, \{0.0795695,-0.17\}, \{0.0795695,-0.17\}, \{0.0795695,-0.17\}, \{0.0795695,-0.17\}, \{0.0795695,-0.17\}, \{0.0795695,-0.17\}, \{0.0795695,-0.17\}, \{0.0795695,-0.17\}, \{0.0795695,-0.17\}, \{0.0795695,-0.17\}, \{0.0795695,-0.17\}, \{0.0795695,-0.17\}, \{0.0795695,-0.17\}, \{0.0795695,-0.17\}, \{0.0795695,-0.17\}, \{0.0795695,-0.17\}, \{0.0795695,-0.17\}, \{0.0795695,-0.17\}, \{0.0795695,-0.17\}, \{0.0795695,-0.17\}, \{0.0795695,-0.17\}, \{0.0795695,-0.17\}, \{0.0795695,-0.17\}, \{0.0795695,-0.17\}, \{0.0795695,-0.17\}, \{0.0795695,-0.17\}, \{0.0795695,-0.17\}, \{0.0795695,-0.17\}, \{0.0795695,-0.17\}, \{0.0795695,-0.17\}, \{0.0795695,-0.17\}, \{0.0795695,-0.17\}, \{0.0795695,-0.17\}, \{0.0795695,-0.17\}, \{0.0795695,-0.17\}, \{0.0795695,-0.17\}, \{0.0795695,-0.17\}, \{0.0795695,-0.17\}, \{0.0795695,-0.17\}, \{0.0795695,-0.17\}, \{0.0795695,-0.17\}, \{0.0795695,-0.17\}, \{0.0795695,-0.17\}, \{0.0795695,-0.17\}, \{0.0795695,-0.17\}, \{0.0795695,-0.17\}, \{0.0795695,-0.17\}, \{0.0795695,-0.17\}, \{0.0795695,-0.17\}, \{0.0795695,-0.17\}, \{0.0795695,-0.17\}, \{0.0795695,-0.17\}, \{0.0795695,-0.17\}, \{0.0795695,-0.17\}, \{0.0795695,-0.17\}, \{0.0795695,-0.17\}, \{0.0795695,-0.17\}, \{0.0795695,-0.17\}, \{0.0795695,-0.17\}, \{0.0795695,-0.17\}, \{0.0795695,-0.17\}, \{0.0795695,-0.
```

q = m[[9, 2]];

 $t = SparseArray [\{\{i_, j_\}\}/; Abs[i-j] \le 1 \Rightarrow q[[i, j-i+2]]\}, \{10, 10\}] // MatrixForm$

0.23	-0.119677	0	0	0	0	0	0	0
-0.000376644	-0.01	0.000376644	0	0	0	0	0	0
0	0.15957	-0.33	0.16043	0	0	0	0	0
0	0	0.359516	-0.73	0.360484	0	0	0	0
0	0	0	0.599462	-1.21	0.600538	0	0	0
0	0	0	0	0.879408	-1.77	0.880592	0	0
0	0	0	0	0	1.19935	-2.41	1.20065	0
0	0	0	0	0	0	1.5593	-3.13	1.5607
0	0	0	0	0	0	0	1.95925	-3.93
0	0	0	0	0	0	0	0	2.39919

Max [res]

6.35254

indices = Transpose[Reverse[Transpose[Tuples[Table[i, {i, 100}], n]]]]

A very large output was generated. Here is a sample of it:

```
 \{\{1,1\},\{2,1\},\{3,1\},\{4,1\},\{5,1\},\{6,1\},\{7,1\},\{8,1\},\{9,1\},\{10,1\},\{11,1\},\{12,1\},\{13,1\},\{14,1\},\{15,1\},\{16,1\},\{17,1\},\{18,1\},\{19,1\},\{20,1\},\{21,1\},\{22,1\},\{23,1\},\{24,1\},\{25,1\},\{26,1\},\{27,1\},\{28,1\},\{29,1\},\{30,1\},\ll9940\gg,\{71,100\},\{72,100\},\{73,100\},\{74,100\},\{75,100\},\{76,100\},\{77,100\},\{78,100\},\{79,100\},\{80,100\},\{81,100\},\{82,100\},\{83,100\},\{84,100\},\{85,100\},\{86,100\},\{87,100\},\{88,100\},\{89,100\},\{90,100\},\{91,100\},\{92,100\},\{93,100\},\{94,100\},\{95,100\},\{96,100\},\{97,100\},\{98,100\},\{99,100\},\{100,100\}\}
```

Show Less | Show More | Show Full Output | Set Size Limit...