In[ ]:=

```
you := Select[Flatten[Transpose[{Range[100, 999]}].{Range[100, 999]}],
        选择    压平    转置      范围                范围
   IntegerDigits[#] == Reverse[IntegerDigits[#]] &] // Max;
   不同进制的数字表示    反向排序 不同进制的数字表示      最大值
AbsoluteTiming@you
绝对时间
```

Out[ ]=

{1.78617, 906 609}

In[ ]:=

```
optimization :=
 SelectFirst[# == IntegerReverse@# &]@ReverseSort@Flatten[#ᵀ.# &@{Range[100, 999]}]
 选择第一个        颠倒整数              反规范排序   压平          范围
AbsoluteTiming@optimization
绝对时间
```

Out[ ]=

{0.0891853, 906 609}

In[ ]:=

```
AbsoluteTiming@
绝对时间
 SelectFirst[# == IntegerReverse@# &]@ReverseSort@Flatten[#ᵀ.# &@{Range[900, 999]}]
 选择第一个        颠倒整数              反规范排序   压平          范围
```

Out[ ]=

{0.0239881, 906 609}

In[ ]:=

```
me := Max@Select[PalindromeQ]@Flatten@Table[i j, {i, 100, 999}, {j, 100, 999}];
      …   选择   回文判定      压平    表格
AbsoluteTiming@me
绝对时间
```

Out[ ]=

{4.10285, 906 609}

In[ ]:=

```
AbsoluteTiming@
绝对时间
 Max@Select[# == IntegerReverse@# &]@Flatten@Table[i j, {i, 100, 999}, {j, 100, 999}]
 …   选择       颠倒整数               压平    表格
```

Out[ ]=

{3.89269, 906 609}

In[ ]:=

```
AbsoluteTiming@Max@Select[# == IntegerReverse@# &]@
绝对时间        …   选择       颠倒整数
   Flatten@ParallelTable[i j, {i, 100, 999}, {j, 100, 999}]
   压平    并行产生表格
```

Out[ ]=

{3.85319, 906 609}

In[ ]:=

```
me1 := SelectFirst[PalindromeQ]@
       选择第一个   回文判定
   ReverseSort@Flatten@Table[i j, {i, 100, 999}, {j, 100, 999}];
   反规范排序  压平    表格
AbsoluteTiming@me1
绝对时间
```

Out[ ]=

{0.103928, 906 609}

```
In[ ]:= AbsoluteTiming@SelectFirst[# == IntegerReverse@# &]@
        ReverseSort@Flatten@Table[i j, {i, 100, 999}, {j, 100, 999}]
Out[ ]= {0.102609, 906 609}
```

只快一点点

```
In[ ]:= me2 := Max@SparseArray[{i_, j_} /; PalindromeQ[i j] → i j, {999, 999}];
        AbsoluteTiming@me2
Out[ ]= {5.82097, 906 609}

In[ ]:= me3 := SelectFirst[PalindromeQ]@
           ReverseSort@Flatten@Normal@SparseArray[{i_, j_} → i j, {999, 999}];
        AbsoluteTiming@me3
Out[ ]= {3.06607, 906 609}

In[ ]:= Tuples[Range[3], 2]
Out[ ]= {{1, 1}, {1, 2}, {1, 3}, {2, 1}, {2, 2}, {2, 3}, {3, 1}, {3, 2}, {3, 3}}

In[ ]:= Permutations[Range[3], {2}]
Out[ ]= {{1, 2}, {1, 3}, {2, 1}, {2, 3}, {3, 1}, {3, 2}}

In[ ]:= Subsets[Range[3], {2}]
Out[ ]= {{1, 2}, {1, 3}, {2, 3}}

In[ ]:= AbsoluteTiming@SelectFirst[# == IntegerReverse@# &]@
        ReverseSort@(Times @@@ Subsets[Range[100, 999], {2}])
Out[ ]= {0.192735, 906 609}

In[ ]:= AbsoluteTiming@SelectFirst[# == IntegerReverse@# &]@
        ReverseSort@(Times @@@ Tuples[Range[100, 999], 2])
Out[ ]= {0.391944, 906 609}
```

In[ ]:=
```
AbsoluteTiming@SelectFirst[# == IntegerReverse@# &]@
  ReverseSort@(Times @@@ Permutations[Range[100, 999], {2}])
```
绝对时间 选择第一个 颠倒整数 反规范排序 乘 排列 范围

Out[ ]=
```
{0.695188, 906 609}
```

In[ ]:=
```
999^2
```

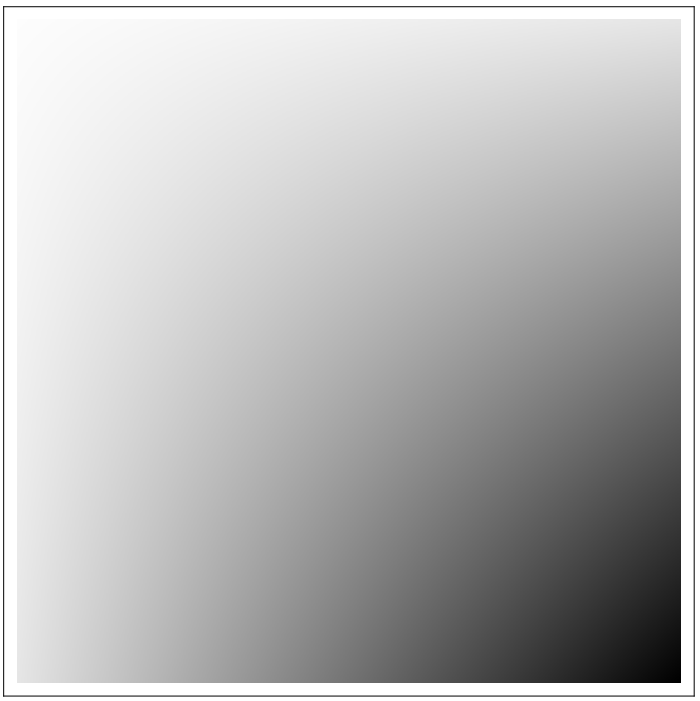
Out[ ]=
```
998 001
```

In[ ]:=
```
906 609 / 993
```

Out[ ]=
```
913
```

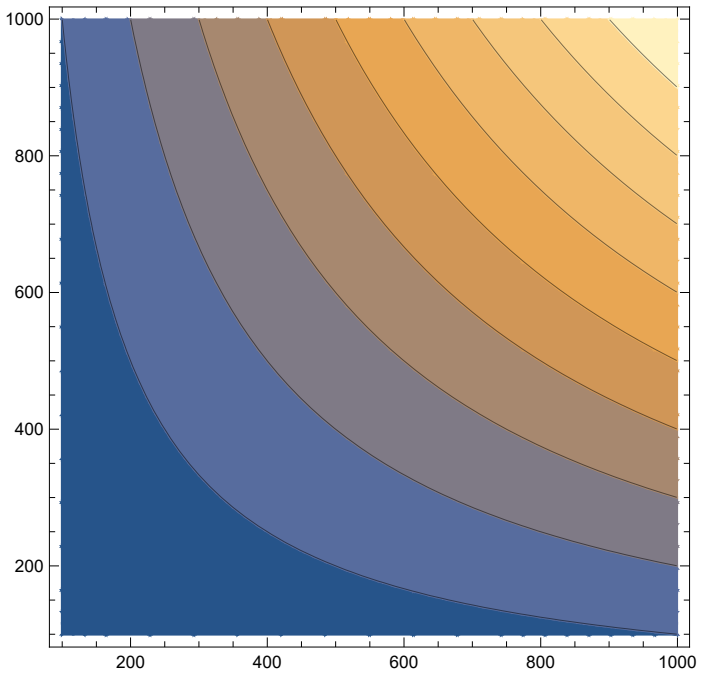
In[ ]:=
```
ArrayPlot@Table[i j, {i, 100, 999}, {j, 100, 999}]
```
图示数组 表格

Out[ ]=



In[ ]:=
```
ContourPlot[i j, {i, 100, 999}, {j, 100, 999}]
```
绘制等高线

Out[ ]=



In[ ]:=
```
999 × 999
998 × 998
997 × 999
```

Out[ ]=
```
998001
```

Out[ ]=
```
996004
```

Out[ ]=
```
996003
```