

```
In[1]:= << KnotTheory`
```

Loading KnotTheory` version of April 20, 2009, 14:18:34.482.

Read more at <http://katlas.org/wiki/KnotTheory>.

```
In[2]:= LeadCoef[K_] := Coefficient[j = Jones[K][q], q, Exponent[j, q]]
```

```
In[3]:= LeadCoef[Knot[3, 1]]
```

KnotTheory:loading : Loading precomputed data in Jones4Knots`.

```
Out[3]= 1
```

```
In[6]:= Select[AllKnots[{3, 13}], Abs[LeadCoef[#]] > 2 &]
```

KnotTheory:loading : Loading precomputed data in KnotTheory/12A.dts.

KnotTheory::credits :

The GaussCode to PD conversion was written by Siddarth Sankaran at the University of Toronto in the summer of 2005.

KnotTheory:loading : Loading precomputed data in KnotTheory/12N.dts.

KnotTheory:loading : Loading precomputed data in KnotTheory/13A.dts.

General::stop : Further output of KnotTheory:loading will be suppressed during this calculation. >>

```
Out[6]= {Knot[11, NonAlternating, 99], Knot[11, NonAlternating, 134],
Knot[11, NonAlternating, 173], Knot[12, NonAlternating, 22], Knot[12, NonAlternating, 30],
Knot[12, NonAlternating, 58], Knot[12, NonAlternating, 139], Knot[12, NonAlternating, 270],
Knot[12, NonAlternating, 429], Knot[12, NonAlternating, 520], Knot[12, NonAlternating, 530],
Knot[12, NonAlternating, 548], Knot[12, NonAlternating, 600], Knot[12, NonAlternating, 626],
Knot[12, NonAlternating, 635], Knot[12, NonAlternating, 659], Knot[12, NonAlternating, 664],
Knot[12, NonAlternating, 789], Knot[12, NonAlternating, 813], Knot[12, NonAlternating, 854],
Knot[12, NonAlternating, 873], Knot[12, NonAlternating, 886], Knot[13, NonAlternating, 42],
Knot[13, NonAlternating, 64], Knot[13, NonAlternating, 70], Knot[13, NonAlternating, 115],
Knot[13, NonAlternating, 117], Knot[13, NonAlternating, 143], Knot[13, NonAlternating, 150],
Knot[13, NonAlternating, 154], Knot[13, NonAlternating, 163], Knot[13, NonAlternating, 177],
Knot[13, NonAlternating, 204], Knot[13, NonAlternating, 331], Knot[13, NonAlternating, 353],
Knot[13, NonAlternating, 432], Knot[13, NonAlternating, 515], Knot[13, NonAlternating, 527],
Knot[13, NonAlternating, 1257], Knot[13, NonAlternating, 1325],
Knot[13, NonAlternating, 1382], Knot[13, NonAlternating, 1494],
Knot[13, NonAlternating, 1500], Knot[13, NonAlternating, 1656],
Knot[13, NonAlternating, 1669], Knot[13, NonAlternating, 1672],
Knot[13, NonAlternating, 1751], Knot[13, NonAlternating, 1753],
Knot[13, NonAlternating, 1787], Knot[13, NonAlternating, 1867],
Knot[13, NonAlternating, 1901], Knot[13, NonAlternating, 1910],
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Knot [13, NonAlternating, 1933], Knot [13, NonAlternating, 2008],
Knot [13, NonAlternating, 2068], Knot [13, NonAlternating, 2086],
Knot [13, NonAlternating, 2231], Knot [13, NonAlternating, 2253],
Knot [13, NonAlternating, 2263], Knot [13, NonAlternating, 2297],
Knot [13, NonAlternating, 2493], Knot [13, NonAlternating, 2548],
Knot [13, NonAlternating, 2641], Knot [13, NonAlternating, 2657],
Knot [13, NonAlternating, 2669], Knot [13, NonAlternating, 2718],
Knot [13, NonAlternating, 2730], Knot [13, NonAlternating, 2808],
Knot [13, NonAlternating, 2814], Knot [13, NonAlternating, 2824],
Knot [13, NonAlternating, 2825], Knot [13, NonAlternating, 2829],
Knot [13, NonAlternating, 2830], Knot [13, NonAlternating, 2832],
Knot [13, NonAlternating, 2840], Knot [13, NonAlternating, 2850],
Knot [13, NonAlternating, 2854], Knot [13, NonAlternating, 2933],
Knot [13, NonAlternating, 2966], Knot [13, NonAlternating, 2990],
Knot [13, NonAlternating, 3051], Knot [13, NonAlternating, 3081],
Knot [13, NonAlternating, 3254], Knot [13, NonAlternating, 3271],
Knot [13, NonAlternating, 3326], Knot [13, NonAlternating, 3333],
Knot [13, NonAlternating, 3342], Knot [13, NonAlternating, 3352],
Knot [13, NonAlternating, 3360], Knot [13, NonAlternating, 3376],
Knot [13, NonAlternating, 3378], Knot [13, NonAlternating, 3379],
Knot [13, NonAlternating, 3386], Knot [13, NonAlternating, 3426],
Knot [13, NonAlternating, 3440], Knot [13, NonAlternating, 3442],
Knot [13, NonAlternating, 3454], Knot [13, NonAlternating, 3478],
Knot [13, NonAlternating, 3483], Knot [13, NonAlternating, 3561],
Knot [13, NonAlternating, 3618], Knot [13, NonAlternating, 3623],
Knot [13, NonAlternating, 3637], Knot [13, NonAlternating, 3640],
Knot [13, NonAlternating, 3657], Knot [13, NonAlternating, 3671],
Knot [13, NonAlternating, 3672], Knot [13, NonAlternating, 3692],
Knot [13, NonAlternating, 3697], Knot [13, NonAlternating, 3721],
Knot [13, NonAlternating, 3784], Knot [13, NonAlternating, 3786],
Knot [13, NonAlternating, 3943], Knot [13, NonAlternating, 3945],
Knot [13, NonAlternating, 3976], Knot [13, NonAlternating, 4078],
Knot [13, NonAlternating, 4103], Knot [13, NonAlternating, 4168],
Knot [13, NonAlternating, 4187], Knot [13, NonAlternating, 4191],
Knot [13, NonAlternating, 4231], Knot [13, NonAlternating, 4367],
Knot [13, NonAlternating, 4386], Knot [13, NonAlternating, 4449],
Knot [13, NonAlternating, 4484], Knot [13, NonAlternating, 4518],
Knot [13, NonAlternating, 4521], Knot [13, NonAlternating, 4531],
Knot [13, NonAlternating, 4584], Knot [13, NonAlternating, 4588],
Knot [13, NonAlternating, 4593], Knot [13, NonAlternating, 4617],
Knot [13, NonAlternating, 4666], Knot [13, NonAlternating, 4692],
Knot [13, NonAlternating, 4740], Knot [13, NonAlternating, 4762],
Knot [13, NonAlternating, 4764], Knot [13, NonAlternating, 4774],
Knot [13, NonAlternating, 4786], Knot [13, NonAlternating, 4800],
Knot [13, NonAlternating, 4875], Knot [13, NonAlternating, 4881],

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Knot[13, NonAlternating, 4895], Knot[13, NonAlternating, 4905],  
Knot[13, NonAlternating, 4911], Knot[13, NonAlternating, 4949],  
Knot[13, NonAlternating, 4969], Knot[13, NonAlternating, 4990],  
Knot[13, NonAlternating, 5009], Knot[13, NonAlternating, 5032],  
Knot[13, NonAlternating, 5049], Knot[13, NonAlternating, 5050],  
Knot[13, NonAlternating, 5063], Knot[13, NonAlternating, 5090]}
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In[7]:= Select[AllKnots[{3, 13}], Abs[LeadCoef[#]] > 3 &]
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Out[7]= {Knot[13, NonAlternating, 2008], Knot[13, NonAlternating, 5032]}
```