

```

nn=Range[1,10000000]
n=Select[nn,PrimeQ,(10000)]
n2=Select[nn,IntegerQ,(500)]
k=(n^2)-1+(n)+(2-4n)
d=n^4-1+n^2
c=n^3+2
e=Mod[c,3]
f=Mod[d,3]
g=Mod[k,3]
h=Mod[c,7]
i=Mod[d,7]
j=Mod[k,7]
l=Mod[c,4]
m=Mod[d,4]
o=Mod[k,4]
r=Mod[c,5]
s=Mod[d,5]
t=Mod[k,5]
QQ=Transpose[{e,f,g,h,i,j,l,m,o,r,s,t}]
Tally[QQ]
nn=Range[1,10000000]
n=Select[nn,PrimeQ,(10000)]
n2=Select[nn,IntegerQ,(500)]
k=(n^2)-1+(n)+(2-4n)
d=n^4-1+n^2
c=n^3+2
e=Mod[c,3]
f=Mod[d,3]
g=Mod[k,3]
h=Mod[c,7]
i=Mod[d,7]

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j=Mod[k,7]
l=Mod[c,4]
m=Mod[d,4]
o=Mod[k,4]
r=Mod[c,5]
s=Mod[d,5]
t=Mod[k,5]
QQ1=Transpose[{e,f,g,h,i,j,l,m,o,r,s,t}]
Join[QQ,QQ1]
Tally[%]
(* Definir as listas *)
lista1 = QQ;
lista2 = QQ1;

(* Definir o número de vezes para juntar as listas *)
n = 31;

(* Inicializar a lista combinada *)
listaCombinada = lista1;

(* Usar um loop para juntar as listas n vezes *)
Do[
  listaCombinada = Join[listaCombinada, lista2],
  {n}
]

(* Exibir a lista combinada *)
listaCombinada
Tally[%]
n2=1299709
k1=(n2^2)-1+(n2)+(2-4n2)

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$d1 = n2^4 - 1 + n2^2$

$c1 = n2^3 + 2$

$e1 = \text{Mod}[c1, 3]$

$f1 = \text{Mod}[d1, 3]$

$g1 = \text{Mod}[k1, 3]$

$h1 = \text{Mod}[c1, 7]$

$i1 = \text{Mod}[d1, 7]$

$j1 = \text{Mod}[k1, 7]$

$l1 = \text{Mod}[c1, 4]$

$m1 = \text{Mod}[d1, 4]$

$o1 = \text{Mod}[k1, 4]$

$r1 = \text{Mod}[c1, 5]$

$s1 = \text{Mod}[d1, 5]$

$t1 = \text{Mod}[k1, 5]$

$QQ = \text{Transpose}[\{e, f, g, h, i, j, l, m, o, r, s, t\}]$

$a = \{e1, f1, g1, h1, i1, j1, l1, m1, o1, r1, s1, t1\}$

$\text{existeSublista} = \text{MemberQ}[\text{listaCombinada}, a]$

$gh = \text{Position}[\text{listaCombinada}, a]$

$\text{Position}[gh, 100050]$

$\{0, 1, 2, 1, 5, 4, 3, 1, 3, 1, 1, 0\}$

True

$\{\{50\}, \{180\}, \{237\}, \{401\}, \{449\}, \{749\}, \{844\}, \{892\}, \{938\}, \{986\}, \{1029\}, \{1075\}, \{1125\}, \{1308\}, \{1350\}, \{1481\}, \{1530\}, \{1575\}, \{1614\}, \{1748\}, \{1793\}, \{1882\}, \{1964\}, \{2007\}, \{2096\}, \{2303\}, \{2344\}, \{2431\}, \{2690\}, \{2845\}, \{2974\}, \{3007\}, \{3135\}, \{3176\}, \{3215\}, \{3290\}, \{3413\}, \{3495\}, \{3578\}, \{3624\}, \{3741\}, \{3780\}, \{3940\}, \{4055\}, \{4174\}, \{4216\}, \{4331\}, \{4371\}, \{4458\}, \{4726\}, \{4873\}, \{4954\}, \{5073\}, \{5113\}, \{5423\}, \{5458\}, \{5535\}, \{5576\}, \{5614\}, \{5731\}, \{5774\}, \{5816\}, \{5892\}, \{5968\}, \{6084\}, \{6156\}, \{6381\}, \{6452\}, \{6605\}, \{6717\}, \{6863\}, \{7050\}, \{7169\}, \{7205\}, \{7241\}, \{7314\}, \{7504\}, \{7614\}, \{7656\}, \{7798\}, \{7875\}, \{8029\}, \{8069\}, \{8139\}, \{8212\}, \{8248\}, \{8358\}, \{8505\}, \{8646\}, \{8688\}, \{8765\}, \{8834\}, \{9057\}, \{9095\}, \{9213\}, \{9252\}, \{9498\}, \{9535\}, \{9606\}, \{9643\}, \{9715\}, \{9754\}, \{9893\}, \{9928\}, \{10050\}, \{10180\}, \{10237\}, \{10401\}, \{10449\}, \{10749\}, \{10844\}, \{10892\}, \{10938\}, \{10986\}, \{11029\}, \{11075\}, \{11125\}, \{11308\}, \{11350\}, \{11481\}, \{11530\}, \{11575\}, \{11614\}, \{11748\}, \{11793\}, \{11882\}, \{11964\}, \{12007\}, \{12096\}, \{12303\}, \{12344\}, \{12431\}, \{12690\}, \{12845\}, \{12974\}, \{13007\}, \{13135\}, \{13176\}, \{13215\}, \{13290\}, \{13413\}, \{13495\}, \{13578\}, \{13624\}, \{13741\}, \{13780\}, \{13940\}, \{14055\}, \{14174\}, \{14216\}, \{14331\}, \{14371\}, \{14458\}, \{14726\}, \{14873\}, \{14954\}, \{15073\}, \{15113\}, \{15423\}, \{15458\}, \{15535\}, \{15576\}, \{15614\}, \{15731\}, \{15774\}, \{15816\}, \{15892\}, \{15968\}, \{16084\}, \{16156\}, \{16381\}, \{16452\}, \{16605\}, \{16717\}, \{1686\}$

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```

1041

(\* Definir o intervalo de 29 até 1299709 com passo de 420 \*)

```
intervalo = Table[n, {n, 29, 1299709, 420}];
```

(\* Filtrar apenas os números primos dentro do intervalo \*)

```
primos = Select[intervalo, PrimeQ];
```

(\* Exibir os números primos \*)

```
primos
```

```
Length[primos]
```

1044

In this specific case, the only thing that repeats is the sublists referring to the first 10,000 primes and then it repeats 31 times and still the position referring to the position of prime 1299,709 is obtained, which is 100,000 in this case 100050 minus the first 50 in position 1041 in contrast to the expected 1044. But note that no primes were used after 10,000, only a repetition of sublists referring to primes and still it was possible to predict the position of the prime number in question, which gives this analysis an extreme power of predicting the position of the primes

without me having to have discriminated them beforehand, revealing in fact a complete pattern of prime numbers obtained through 3 polynomials and countless Mod forming sublists that are specific digitals of the appearance of primes throughout their continuous increasing sequence.