
'01'

```
clc
n=1:50;
M=2.^n-1;
k=isprime(M);
for i=1:length(n)
    fprintf('%4i    %20i    %2i\n',n(i),M(i),k(i))
end
NumberOfPrime=sum(k)
NotPrime=length(n)-sum(k)
```

%%%%%%%%%%%%Output%%%%%%%%%

ans =

01

1	1	0
2	3	1
3	7	1
4	15	0
5	31	1
6	63	0
7	127	1
8	255	0
9	511	0
10	1023	0
11	2047	0
12	4095	0
13	8191	1
14	16383	0
15	32767	0
16	65535	0
17	131071	1
18	262143	0
19	524287	1
20	1048575	0
21	2097151	0
22	4194303	0
23	8388607	0
24	16777215	0
25	33554431	0
26	67108863	0
27	134217727	0
28	268435455	0
29	536870911	0
30	1073741823	0

31	2147483647	1
32	4294967295	0
33	8589934591	0
34	17179869183	0
35	34359738367	0
36	68719476735	0
37	137438953471	0
38	274877906943	0
39	549755813887	0
40	1099511627775	0
41	2199023255551	0
42	4398046511103	0
43	8796093022207	0
44	17592186044415	0
45	35184372088831	0
46	70368744177663	0
47	140737488355327	0
48	281474976710655	0
49	562949953421311	0
50	1125899906842623	0

NumberOfPrime =

8

NotPrime =

42

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