Numbers ended in 1,3,7,9 prime vs composite behavior

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```
sq=Table[j,{j,1000000}]
sq=Select[sq,OddQ,(100000)]
sq1=Table[j,{j,9050}]
nb=Select[sq,CompositeQ,(10000)]
n=Select[nb,OddQ,(100)]
b=Select[sq,PrimeQ,(100)]
n1=(n^8-1)+(b^4)
nn=n1+nb+1
yt=Select[n1,PrimeQ(100)]
gg=Select[nn,PrimeQ(100)]
t=Select[n1,Mod[#,10]==9 &]
es=Position[n1,_?(Mod[#,10]==1 &)]
er=Flatten[es]
et=Reverse[er]
as=(er+et)
ad=Reverse[as]
de=(as-ad)/2Length[yt]
ListLinePlot[as]
ListPolarPlot[as]
PrimeQ[n1]
gh=n1[[-10]]
Solve[x^8-1+x^4==gh,x,Integers]
```

```
74885669192206063105

{}
```

```
sq=Table[j,{j,1000000}]
sq=Select[sq,OddQ,(100000)]
sq1=Table[j,{j,9050}]
nb=Select[sq,CompositeQ,(10000)]
n=Select[sq,PrimeQ,(100)]
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n1=(n^8-1)+(b^4)
nn=n1+nb+1
yt=Select[n1,PrimeQ(100)]
gg=Select[nn,PrimeQ(100)]
t=Select[n1,Mod[#,10]==9 &]
es=Position[n1,_?(Mod[#,10]==1 &)]
er=Flatten[es]
et=Reverse[er]
```

```
as=(er+et)
ad=Reverse[as]
de=(as-ad)/2Length[yt]
ListLinePlot[as]
ListPolarPlot[as]
PrimeQ[n1]
gh=n1[[-1]]
Solve[x^8-1+x^4==gh,x,Integers]
```

```
801490927432459753944 1
```

```
{{x->-547},{x->547}}
```