pb36

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[1]:
```
from math import sqrt
```

Il y a plusieurs manière d'aborder le problème. La solution la plus intuitive est de transformer int en str et comparer :

[14]:
```
def is_palindrom(d):
    d = str(d) ; n = len(d)
    if n < 2:
        return True
    return d[:(n//2)] == d[-((n//2)):][::-1]

def base2(n):
    res = ''
    while n>0:
        if n%2 == 0:
            res += '0'
        else:
            res += '1'
        n = n//2
    return res[::-1]
```

[20]:
```
%timeit sum((i for i in range(1_000_000+1) if (is_palindrom(i) and␣
↪is_palindrom(base2(i)))))
```

```
389 ms ± 5.6 ms per loop (mean ± std. dev. of 7 runs, 1 loop each)
```