```
Please Input Principal: 625937

Please Input Interest Rate as a Decimal:0.035

Please Enter The Term of the Loan in Years:30

Please Enter The Number of Payments Per Year:12

Principal: 625937

Rate: 0.035

Term: 30

Compound: 12

Total paid after 30 years: 1785978.0083211404

Interest paid after 30years: 1160041.0083211404
```

```
Input Principal: 625937

Input Total Amount Paid: 1785978.0083211404

Input Term in Years: 30

Input Number of Payments Per Year: 12
The interest rate on a loan for 625937 that cost 1785978.0083211404 over 30 years is: 0.03500000000000014

In [13]:
```

The result from rate.py matched my input from interest.py after I went back and used parentheses to force the correct order of operations.