

Main.cpp

```
#include "interest.h"

int main()
{
    Interest i;

    i.findInterest();

    return 0;
}
```

Interest.h

```
#include <iostream>

class Interest
{
private:
    double principal;
    double interestRate;
    int numberOfTimes;

public:
    void findInterest();
};
```

Interest.cpp

```
#include "interest.h"
#include <iostream>
#include <iomanip>
#include <cmath>
```

```

using namespace std;

void Interest::findInterest()
{
    double totalAmount;
    cout << "\tCalculate Interest Earned" << endl;
    cout << "Please input the principal: ";
    cin >> principal;
    cout << "Please input the interest rate: ";
    cin >> interestRate;
    cout << "Please input the number of times the interest
compounds: ";
    cin >> numberOfTimes;

    totalAmount = principal * pow((1 +
((interestRate/100)/numberOfTimes)), numberOfTimes);

    cout << fixed << showpoint << setprecision(2)
    << "Interest rate: \t\t" << interestRate << "%" << endl
    << "Times compounded: \t" << numberOfTimes << endl
    << "Principal: \t\t$" << principal << endl
    << "Interest: \t\t$" << totalAmount - principal << endl
    << "Amount in savings: \t$" << totalAmount << endl;
};

```

```

    Calculate Interest Earned
Please input the principal: 1000
Please input the interest rate: 4.25
Please input the number of times the interest compounds: 12
Interest rate:          4.25%
Times compounded:      12
Principal:              $1000.00
Interest:               $43.34
Amount in savings:     $1043.34

```