

```

/* FILE NAME: .....
 * AUTHOR: Solution Briefing
 * See our syllabus for a good comment
 */

#include <iostream>
using namespace std;

int main() {
    // VARIABLE INITIALIZATION

    → Properly define your variables.....
    .....
```

// CURRENCY FORMATTING

```

cout.setf(ios::fixed);
cout.setf(ios::showpoint);
cout.precision(2);

// USER INPUT
// NOTE: For valid input, the loan, interest, and monthly payment must
// be positive. The monthly payment must also be large enough to
// terminate the loan.
cout << "\nLoan Amount: ";
cin >> loan;
```

→ Your program will not move forward until a positive loan is entered

```

cout << "Interest Rate (% per year): ";
cin >> interestRate;
```

→ Your program will not move forward until a positive interest rate is entered

```

// GET PROPER INTEREST RATES FOR CALCULATIONS
interestRate /= 12;
interestRateC = interestRate / 100;
cout << "Monthly Payments: ";
cin >> monthlyPaid;
```

→ Your program will not move forward until a monthly payment is sufficient

```

cout << endl;

// AMORTIZATION TABLE
cout << "*****\n"
<< "\tAmortization Table\n"
<< "*****\n"
<< "Month\tBalance\t\tPayment\t\tRate\t\tInterest\t\tPrincipal\n";
```

// LOOP TO FILL TABLE

```

while (loan > 0) {
    if (currentMonth == 0) {
        cout << currentMonth++ << "\t$" << loan;
```

```
if (loan < 1000) cout << "\t"; // Formatting MAGIC
    cout << "\t" << "N/A\tN/A\tN/A\tN/A\n";
}
else {
    Properly calculate and display "monthlypaid" and "principal"
    when (1) loan * (1 + interestRateC) < monthlyPaid
    and (2) loan * (1 + interestRateC) >= monthlyPaid
}
cout << "*****\n";
cout << "\nIt takes " << --currentMonth << " months to pay off "
    << "the loan.\n"
    << "Total interest paid is: $" << interestTotal;
cout << endl << endl;
return 0;
}
```

