```
/* Coding Problems (25 points) */

/*

    Please write code for the two problems below.  Write the code for both
    problems in the area below designated inside of the main function. When
    completed, the main function should run the code for both problems.

    1. Write code that calculates mileage reimbursement for a salesperson at
    a rate of $.48 per mile. Your program should get the mileage from the user
    in this manner:
        MILEAGE REIMBURSEMENT CALCULATOR
        Enter beginning odometer reading: 13505.2
        Enter ending odometer reading: 13810.6
        You traveled 305.4 miles. At $0.48 per mile, your reimbursement is $146.59.

 #include <stdio.h>
  #define REIMBURSEMENT_PER_MILE 0.48

  int main()
  {
 //define the variables
     float starting_odometer_miles = 0.0;
     float ending_odometer_miles = 0.0;
     float milesTraveled = 0.0;
     float reimbursment_amount = 0.0;

//Mileage Reimbursment Calculator

 //Get the starting odometer miles from the user
 printf("Enter the starting odometer amount:");
 scanf("%f", &starting_odometer_miles);

 //Get the ending odometer miles from the user
 printf("Enter the ending odometer amount:");
 scanf("%f", &ending_odometer_miles);

 //Calculating the miles traveled and the amount that needs to be reimbursed
 mileTraveled = ending_odometer_miles - starting_odometer_miles;
 reimbursment_amount = milesTraveled * REIMBURSEMENT_PER_MILE;

 //Display the results to the user
 printf("You traveled %f miles. With a reimbursment rate of %f, your reimbursment
amount is %f", milesTraveled, REIMBURSEMENT_PER_MILE, reimbursement_amount);

 return 0;
  }


    2. Write code to convert a temperature in degrees Fahrenheit to degrees
    Celsius. Your program should get the temperature Fahrenheit from the user and
    print the result as:
        FAHRENHEIT TO CELSIUS CALCULATOR
        Enter temperature Fahrenheit: 100.0
        100.0 degrees Fahrenheit is 37.78 degrees Celsius

 #define <stdio.h>

 //defining the temperature variables
```

```
 float temperature_fahrenheit = 0.0;
 float temperature_celsius = 0.0;

 int main()
 {
     //Get the temperature in fahrenheit from the user
     printf("Enter the temperature in degrees fahrenheit:");
     scanf("%f", temperature_fahrenheit);

     //Convert the temperature from degrees fahrenheit to degrees celcius
     temperature_celcius = ((temperature_fahrenheit-32)*5)/9;

     //Display the converted temperature to the user
     printf("%f degrees fahrenheit is %f degrees celsius", temperature_fahrenheit,
temperature_celsius);

     return 0;
 }
```