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#include<stdio.h>

int main(){
    char continue_choice;
    do {
        printf("1: Calculating Fuel Economy\n");
        printf("2: Calculating Distance Traveled\n");
        printf("3: Revised Fuel Economy Calculation\n");
        printf("Your choice : ");
        int function;
        scanf("%d", &function);
        switch(function) {
            case (1):{
                int minutestravel;
                float speed;
                float gasoline;
                float result;
                printf("Enter the number of minutes the car has traveled : \n");
                scanf("%d", &minutestravel);
                printf("Enter the speed of the car\n");
                scanf("%f", &speed);
                printf("Enter the gasoline consumed\n");
                scanf("%f", &gasoline);
                result = (minutestravel/60.0 * speed)/gasoline;
                printf("\nYour car averaged %.2f miles per gallon", result);
                break;
                printf("\nYour car averaged %.2f miles per gallon", result);
                break;
            }
            case (2):{
                float pi = 3.14;
                float radius;
                int revolutions;
                printf("Enter the radius : \n");
                scanf("%f", &radius);
                printf("Enter the revolutions of the tires : \n");
                scanf("%d", &revolutions);
                float circumference = 2 * pi * radius;
                float miles = revolutions * circumference / 63360.0;
                printf("Your car traveled : %.2f miles \n", miles);
                break;
            }
            case (3): {
                float bankinh, xang, fuelEfficiency;
                int sovong;
                printf("Enter the radius of the car's tires: \n ");
                scanf("%f", &bankinh);
                printf("The number of revolutions the car's tires: \n");
                scanf("%d", &sovong);
                printf("The amount of gas, in gallons, the car uses: \n");
                scanf("%f", &xang);
            }
            case (3): {
                float bankinh, xang, fuelEfficiency;
                int sovong;
                printf("Enter the radius of the car's tires: \n ");
                scanf("%f", &bankinh);
                printf("The number of revolutions the car's tires: \n");
                scanf("%d", &sovong);
                printf("The amount of gas, in gallons, the car uses: \n");
                scanf("%f", &xang);
                fuelEfficiency = ((2 * 3.14 * bankinh * sovong)/63360.0)/xang;
                printf("Revised fuel efficiency: %.2f miles per gallon\n", fuelEfficiency);
                break;
            }
            default:
                printf("Invalid choice.\n");
        }
        printf("Tiep tục hay không: (Y/N)? ");
        scanf(" %c", &continue_choice);
    } while (continue_choice == 'Y' || continue_choice == 'y');

    return 0;
}

```

```
C:\Users\thaip\Documents\fu x + v
1: Calculating Fuel Economy
2: Calculating Distance Traveled
3: Revised Fuel Economy Calculation
Your choice : 1
Enter the number of minutes the car has traveled :
30
Enter the speed of the car
40
Enter the gasoline consumed
0.8

Your car averaged 25.00 miles per gallon
Tiep tuc hay khong (Y/N)? |
```

```
C:\Users\thaip\Documents\fu x + v
1: Calculating Fuel Economy
2: Calculating Distance Traveled
3: Revised Fuel Economy Calculation
Your choice : 2
Enter the radius :
16
Enter the revolutions of the tires :
3151
Your car traveled : 5.00 miles

Tiep tuc hay khong (Y/N)? |
```

```
C:\Users\thaip\Documents\fu x + v
1: Calculating Fuel Economy
2: Calculating Distance Traveled
3: Revised Fuel Economy Calculation
Your choice : 3
Enter the radius of the car's tires:
15
The number of revolutions the car's tires:
3151
The amount of gas, in gallons, the car uses:
0.11
Revised fuel efficiency: 42.59 miles per gallon

Tiep tuc hay khong (Y/N)? |
```

```
C:\Users\thaip\Documents\fu x + v
1: Calculating Fuel Economy
2: Calculating Distance Traveled
3: Revised Fuel Economy Calculation
Your choice : 3
Enter the radius of the car's tires:
15
The number of revolutions the car's tires:
3151
The amount of gas, in gallons, the car uses:
0.11
Revised fuel efficiency: 42.59 miles per gallon

Tiep tuc hay khong (Y/N)? y
1: Calculating Fuel Economy
2: Calculating Distance Traveled
3: Revised Fuel Economy Calculation
Your choice : 1
Enter the number of minutes the car has traveled :
40
Enter the speed of the car
40
Enter the gasoline consumed
0.8

Your car averaged 33.33 miles per gallon
Tiep tuc hay khong (Y/N)? |
```

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