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| Assignment Code | : | C.S.P0017 |
| Assignment Name | : | Fuel Economy |
| Student Name | : | Le Thi Thanh Nhan |
| Time/Date | : | 19h30,23/10/2019 |

Approach

Input data and print out result for each functions.

Function 1: change minutes to hour, avespeed from mile/h to mile/second

result=hour\*avespeed/gas

Function 2: change radius from inch to mile, find perimeter of a tire

Result=perimeter\*number of revolution of tire

Function 3: change radius from inch to mile, find perimeter of a tire

Result=perimeter/gas

Source code

#include <stdio.h>

#include <conio.h>

#include <math.h>

double FuelEconomy()

{

    int minutes;

    double avespeed, gas,result;

    printf("How many minutes did you drive?\n");

    scanf("%d", &minutes);

    printf("What was the average speed of the car during that time, in?\n");

    scanf("%lf", &avespeed);

    printf("How many gallons of gas did your car use?\n");

    scanf("%lf", &gas);

    result=(double)((minutes\*60\*(avespeed/3600.00))/gas);

    printf("Your car averaged %.2lf miles per gallon.",result );

}

double DistanceTraveled()

{

    double radius,result;

    int numrevo;

    printf("What is the radius of your tires, in inches?\n");

    scanf("%lf", &radius);

    radius=radius\*1.578\*pow(10,-5);

    printf("How many revolutions did your car's tires make?\n");

    scanf("%d", &numrevo);

    result=(double)(radius\*2\*3.14\*numrevo);

    printf("Your car traveled %f miles.",result );

}

double RFEC()

{

    int numrevo;

    double radius,avespeed, gas,result;

    printf("What is the radius of your tires, in inches?\n");

    scanf("%lf", &radius);

    radius=radius\*1.578\*pow(10,-5);

    printf("How many revolutions did your car's tires make?\n");

    scanf("%d", &numrevo);

    printf("How many gallons of gas did your car use?\n");

    scanf("%lf", &gas);

    result=(double)((radius\*2\*3.14\*numrevo)/gas);

    printf("Your car averaged %lf miles per gallon.", result);

}

int main()

{

    int op;

    do

    {

        printf("\n1-Calculating Fuel Economy");

        printf("\n2-Calculating Distance Traveled");

        printf("\n3-Revised FuelEconomy Calculation");

        printf("\n\nChoice feature:");

        scanf("%d",&op);

        switch(op)

        {

            case 1: FuelEconomy();break;

            case 2: DistanceTraveled();break;

            case 3: RFEC();break;

        }

        printf("\n\n\n");

    } while (0<op&&op<4);

    getch();

    return 0;

}

Result

