Programming Fundamental – ENSF 337

Lab 2

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B01

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**Lab2exe\_D2.c**

**ENSF Fall 2019 Lab 2 Exercise D2**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Run # | Your Inputs | What is the value of n | What is the value of i | What is the value d |
| 1 | 12 0.56 | 2 | 12 | 0.560000 |
| 2 | 5.12 9.56 | 2 | 5 | 0.120000 |
| 3 | 12 ab | 1 | 12 | 1234.500000 |
| 4 | ab 12 | 0 | 333 | 1234.500000 |
| 5 | 5ab 9.56 | 1 | 5 | 1234.500000 |
| 6 | 13 67 | 2 | 13 | 67.00000 |

/\*

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\* lab2exe\_F.c

\* ENSF 337 - Lab 2 - Execise F

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\* Completed by: Jay Chuang

\* Lab Section: B01

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\*/

#include<stdio.h>

void get\_user\_input(double\* distance, double\* speed);

/\*

\* REQUIRES

\* Reads user input, distance in km, and vehicles speed in km/h

\* PROMISES

\* Returns nothing

\*/

void travel\_time\_hours\_and\_minutes(double distance, double speed, double \*hours, double \*minutes);

/\*

\* REQUIRES

\* Receives the user inputs (distance and speed), and calculates the

\* travel time in hours and minutes.

\* PROMISES

\* Returns nothing

\*/

void display\_info( double distance, double speed, double hours, double minutes);

/\*

\* REQUIRES

\* To display the distance that was traveled, followed by the

\* speed of vehicle, and then the travel time in( hours and minutes)

\* PROMISES

\* Returns nothing

\*/

int main(void)

{

double distance, speed, hours, minutes;

get\_user\_input(&distance, &speed);

travel\_time\_hours\_and\_minutes(distance, speed, &hours, &minutes);

display\_info(distance, speed, hours, minutes);

}

void get\_user\_input(double \*distance, double \*speed)

{

printf("Please enter the travel distance in km:");

scanf("%lf",&\*distance);

printf("Now enter the vehicle's average speed (km/hr):");

scanf("%lf",&\*speed);

}

void travel\_time\_hours\_and\_minutes(double distance, double speed, double \*hours, double \*minutes)

{

double time;

double h = 0;

time = distance/speed;

while(time>=1)

{

time -= 1;

h += 1;

}

time \*= 60;

\*minutes = time;

\*hours = h;

}

void display\_info( double distance, double speed, double hours, double minutes)

{

printf("\nYou have travelled %lf km with a speed of %lf km/h in %lf hour(s) and %lf minutes(s)",distance, speed, hours, minutes);

}

**OUTPUT**

**Please enter the travel distance in km:Now enter the vehicle's average speed (km/hr):**

**You have travelled 5.440000 km with a speed of 76.500000 km/h in 0.000000 hour(s) and 4.266667 minutes(s)**

**Lab2exe\_G.c**

**ENSF Fall 2019 Lab 2 Exercise G**







