Name:Reno Redaja

Date:September 29, 2020

1. Write a procedure that asks puts a welcome message to the screen, and tells the user that he/she is about to enter **your** program.

#include <stdio.h>

#include <stdlib.h>

void message() {

printf("Welcome!\n");

printf("You are entering my program!\n");

}

int main(int argc, const char \* argv[]) {

message();

return 0;

}

1. Write a procedure that, given 3 numbers, calculates and prints the average (floats).

#include <stdio.h>

#include <stdlib.h>

float average(float num1, float num2, float num3) {

printf("Your 3 numbers: %f, %f, %f\n", num1, num2, num3);

float sum = num1 + num2 + num3;

float ave = sum / 3;

return ave;

}

int main(int argc, const char \*argv[]) {

float ave = average(5, 12, 8);

printf("The average of your numbers is: %f\n", ave);

return 0;

}

1. Write a function that calculates mileage obtainable for a vehicle. The function will take the gas used in gallons (float).Assume that the car gets 24.75 miles per gallon. The function will return a real showing the distance that the vehicle can travel based on the gas amount given.

#include <stdio.h>

#include <stdlib.h>

float distance(float num) {

float car = 24.75;

float distance = car \* num;

printf("Gallons: %.2f\n", num);

return distance;

}

int main(int argc, const char \*argv[]) {

float d = distance(3.75);

printf("Your vehicle traveled %.2f miles\n", d);

return 0;

}

1. Write a function that calculates how many gallons of gas is obtainable for a specific dollar amount. The function will take one argument, the numerical amount (float) reflecting the amount of money I wish to spend. The function will return how many gallons I can get for this. Assume the cost is $1.7199 per gallon (Hawaii cost).

#include <stdio.h>

#include <stdlib.h>

float gas(float num) {

float gasCost = 1.7199;

float gallons = num / (gasCost);

return gallons;

}

int main() {

float amntGallons = gas(5);

printf("You will get %f gallons of gas\n", amntGallons);

return 0;

}

1. Using the above, write a complete program that will ask for an amount of money, and then calculate the total distance that the car can travel. Do not re-write the functions for this driver, but do show where the prototypes go.

(USING CODE FROM QUESTION #4)

int main(){

int gasMoney;

printf("Enter amount of money for gas: $");

scanf("%d", &gasMoney);

float amntGallons = gas(gasMoney);

printf("You will get %f gallons of gas\n", amntGallons);

printf("You car will travel %f miles\n", amntGallons \* 24.75); //assuming car gets 24.75 miles per gallon

return 0;

}