#include<stdio.h>

#include<conio.h>

void massConverter();

void speedConverter();

void main(void){

char choice;

printf("----------Unit Converter Menu----------\n\n");

printf("Enter your choice 1 or 2:\n");

printf("1. Mass Conversions\n");

printf("2. Speed Conversions\n");

fflush(stdin);

choice=getchar();

switch(choice){

case '1':

massConverter();

break;

case '2':

speedConverter();

break;

default:

printf("INVALID CHOICE\n");

break;

}

}

void massConverter() {

char sub\_choice;

float mass;

printf("Mass Converter Menu:\n");

printf("Enter your choice:\n");

printf("1. Kilograms to Grams\n");

printf("2. Grams to Kilograms\n");

printf("3. Kilograms to Tonnes\n");

printf("4. Tonnes to Kilograms\n");

printf("5. Kilograms to Ounces\n");

printf("6. Ounces to Kilograms\n");

printf("7. Kilograms to Pounds\n");

printf("8. Pounds to Kilograms\n");

fflush(stdin);

sub\_choice = getchar();

switch (sub\_choice) {

case '1':

printf("Enter mass in kilograms:\n");

scanf("%f", &mass);

mass = mass \* 1000;

printf("Converted mass to Grams: %.3f g\n", mass);

break;

case '2':

printf("Enter mass in grams:\n");

scanf("%f", &mass);

mass = mass / 1000;

printf("Converted mass to Kilograms: %.3f kg\n", mass);

break;

case '3':

printf("Enter mass in kilograms:\n");

scanf("%f", &mass);

mass = mass / 1000;

printf("Converted mass to Tonnes: %.3f t\n", mass);

break;

case '4':

printf("Enter mass in Tonnes:\n");

scanf("%f", &mass);

mass = mass \* 1000;

printf("Converted mass to Kilograms: %.3f kg\n", mass);

break;

case '5':

printf("Enter mass in Kilograms:\n");

scanf("%f", &mass);

mass = mass \* 35.27396;

printf("Converted mass to Ounces: %.3f oz\n", mass);

break;

case '6':

printf("Enter mass in ounces:\n");

scanf("%f", &mass);

mass = mass / 35.27396;

printf("Converted mass to Kilograms: %.3f kg\n", mass);

break;

case '7':

printf("Enter mass in Kilograms:\n");

scanf("%f", &mass);

mass = mass \* 2.20462;

printf("Converted mass to Pounds: %.3f lb\n", mass);

break;

case '8':

printf("Enter mass in Pounds:\n");

scanf("%f", &mass);

mass = mass / 2.20462;

printf("Converted mass to Kilograms: %.3f lb\n", mass);

break;

default:

printf("INVALID CHOICE\n");

break;

}

}

void speedConverter(){

char sub\_choice;

float speed;

printf("Speed Converter Menu:\n");

printf("Enter your choice 1 to 4:\n");

printf("1. m/s to km/h\n");

printf("2. km/h to m/s\n");

printf("3. miles/s to miles/h\n");

printf("4. miles/h to miles/s\n");

fflush(stdin);

sub\_choice=getchar();

switch(sub\_choice){

case '1':

printf("Conversion from m/s to km/h\n");

printf("Enter speed in m/s:\n");

scanf("%f", &speed);

speed=speed\*3.6;

printf("Converted speed to Kilometers per hour: %.3f km/h\n", speed);

break;

case '2':

printf("Conversion from km/h to m/s\n");

printf("Enter speed in km/h:\n");

scanf("%f", &speed);

speed=speed/3.6;

printf("Converted speed to Meters per second: %.3f m/s\n", speed);

break;

case '3':

printf("Conversion from m/s to m/h\n");

printf("Enter speed in m/s:\n");

scanf("%f", &speed);

speed=speed\*3600/1609.344;

printf("Converted speed to Miles per hour: %.3f mph\n", speed);

break;

case '4':

printf("Conversion from miles/h to miles/s\n");

printf("Enter speed in mph:\n");

scanf("%f", &speed);

speed=speed/3600\*1609.344;

printf("Converted speed to Meters per second: %.3f mps\n", speed);

break;

default:

printf("INVALID CHOICE\n");

break;

}

}