#include <stdio.h>

int n1,n2,c1,c2,c3,c4,c5,p;

float f1,f2;

void choose1();

void choose2();

void choose3();

void choose4();

void choose5();

void choose6();

int main() {

choose1();

return 0;

}

void choose1(){

printf("Choose the option\n");

printf("1.Add\n2.Sub\n3.Mul\n4.Div\n5.Exit\n");

scanf("%d", &c1);

if(c1==1){

choose2();

}

else if(c1==2){

choose3();

}

else if(c1==3){

choose4();

}

else if(c1==4){

choose5();

}

else if(c1==5){

choose6();

}}

void choose2(){

printf("Choose the option\n");

printf("1.Integer Addition\n2.Floating point Addition\n3.Go to main menu\n");

scanf("%d", &c2);

switch(c2){

case 1:

printf("Enter two integer numbers\n");

scanf("%d %d", &n1, &n2);

printf("Addition result is %d\n", (n1+n2));

printf("press 0 to go back\n");

scanf("%d", &p);

if(p==0){

choose2();

}

break;

case 2:

printf("Enter two floating point numbers\n");

scanf("%f %f", &f1, &f2);

printf("Addition result is %.5f\n", (f1+f2));

printf("press 0 to go back\n");

scanf("%d", &p);

if(p==0){

choose2();

}

break;

case 3:

choose1();

break;

}

}

void choose3(){

printf("Choose the option\n");

printf("1.Integer Subtraction\n2.Floating point Subtraction\n3.Go to main menu\n");

scanf("%d", &c3);

switch(c3){

case 1:

printf("Enter two integer numbers\n");

scanf("%d %d", &n1, &n2);

printf("Subtraction result is %d\n", (n1-n2));

printf("press 0 to go back\n");

scanf("%d", &p);

if(p==0){

choose3();

}

break;

case 2:

printf("Enter two floating point numbers\n");

scanf("%f %f", &f1, &f2);

printf("Subtraction result is %.5f\n", (f1-f2));

printf("press 0 to go back\n");

scanf("%d", &p);

if(p==0){

choose3();

}

break;

case 3:

choose1();

break;

}}

void choose4(){

printf("Choose the option\n");

printf("1.Integer Multiplication\n2.Floating point Multiplication\n3.Go to main menu\n");

scanf("%d", &c4);

switch(c4){

case 1:

printf("Enter two integer numbers\n");

scanf("%d %d", &n1, &n2);

printf("Multiplication result is %d\n", (n1\*n2));

printf("press 0 to go back\n");

scanf("%d", &p);

if(p==0){

choose4();

}

break;

case 2:

printf("Enter two floating point numbers\n");

scanf("%f %f", &f1, &f2);

printf("Multiplication result is %.5f\n", (f1\*f2));

printf("press 0 to go back\n");

scanf("%d", &p);

if(p==0){

choose4();

}

break;

case 3:

choose1();

break;

}

}

void choose5(){

printf("Choose the option\n");

printf("1.Integer Division\n2.Floating point Division\n3.Go to main menu\n");

scanf("%d", &c5);

switch(c5){

case 1:

printf("Enter two integer numbers\n");

scanf("%d %d", &n1, &n2);

printf("Division result is %.5f\n", (float)n1/n2);

printf("press 0 to go back\n");

scanf("%d", &p);

if(p==0){

choose5();}

break;

case 2:

printf("Enter two floating point numbers\n");

scanf("%f %f", &f1, &f2);

printf("Division result is %.5f\n", (f1/f2));

printf("press 0 to go back\n");

scanf("%d", &p);

if(p==0){

choose5();}

break;

case 3:

choose1();

break;

}

}

void choose6(){

printf("Thank you for using Menu Driven Calculator Application\n");

}