#include <stdio.h>

#include <windows.h>

#include <string.h>

void curpos(int r, int c) {

COORD cord;

cord.X = r;

cord.Y = c;

SetConsoleCursorPosition(GetStdHandle(STD\_OUTPUT\_HANDLE), cord);

}

int main() {

char cus\_Name[50], add[50], code[50], type[50], consum[50],CZ[50];

float wat\_Fee, fr\_Tax, pmr, cmr;

char user\_ID[50];

char pass[50];

char Mid[] = "1348580";

char Mpw[] = "789456123";

int valid;

curpos(28,2);

printf("Enter your user ID: ");

curpos(48,2);

scanf("%s", user\_ID);

switch (strcmp(user\_ID, Mid)) {

case 0:

curpos (28,3);

printf("Enter your password: ");

curpos(49,3);

scanf("%s", pass);

switch (strcmp(pass, Mpw)) {

case 0:

valid = 1;

curpos(30,4);

printf("Welcome %s", user\_ID);

break;

default:

curpos(28,4);

printf("Invalid User password");

break;

}

break;

default:

curpos(28,4);

printf("Invalid User ID");

break;

}

if (valid){

curpos(28, 5);

printf("MCWD WATER BILL CALCULATOR");

curpos(5, 7);

printf("Consumer Name: ");

curpos(5, 8);

printf("Consumer's Address: ");

curpos(5, 9);

printf("Account Code: ");

curpos(5, 10);

printf("Type: ");

curpos(5,11);

printf("Connection Size:");

curpos(5, 13);

printf("Previous Month Meter Reading: ");

curpos(5, 14);

printf("Current Month Meter Reading: ");

curpos(50, 13);

printf("Consumption:");

curpos(20, 16);

printf("Charges");

curpos(40, 16);

printf("Amount");

curpos(20, 17);

printf("WATER FEE: ");

curpos(20, 18);

printf("FRANCHISE TAX: ");

curpos(20, 19);

printf("PCA: ");

curpos(20, 20);

printf("PCW: ");

curpos(20, 21);

printf("Gross Current Bill: ");

getchar();

curpos(20, 7);

fgets(cus\_Name, sizeof(cus\_Name), stdin);

curpos(25, 8);

fgets(add, sizeof(add), stdin);

curpos(19, 9);

scanf("%s", code);

curpos(11, 10);

scanf("%s", type);

curpos(22,11);

scanf("%s",&CZ);

curpos(35, 13);

scanf("%f", &pmr);

curpos(34, 14);

scanf("%f", &cmr);

float consumption = cmr - pmr;

float waterFee, franchiseTax, pca, pcw, grossBill;

if (consumption < 0){

consumption = 0;

}

if (strcmp(type, "regular") == 0) {

if (consumption <= 10) {

if (strcmp(CZ, "1/2") == 0) {

waterFee = 152.00;

} else if (strcmp(CZ, "3/4") == 0) {

waterFee = 243.20;

} else if (strcmp(CZ, "1") == 0) {

waterFee = 486.40;

} else if (strcmp(CZ, "11/2") == 0) {

waterFee = 1216.00;

} else if (strcmp(CZ, "2") == 0) {

waterFee = 3040.00;

}

} else if (consumption <= 20) {

if (strcmp(CZ, "1/2") == 0) {

waterFee = 152.00 + (consumption - 10) \* 16.80;

} else if (strcmp(CZ, "3/4") == 0) {

waterFee = 243.20 + (consumption - 10) \* 16.80;

} else if (strcmp(CZ, "1") == 0) {

waterFee = 486.40 + (consumption - 10) \* 16.80;

} else if (strcmp(CZ, "11/2") == 0) {

waterFee = 1216.00 + (consumption - 10) \* 16.80;

} else if (strcmp(CZ, "2") == 0) {

waterFee = 3040.00 + (consumption - 10) \* 16.80;

}

} else if (consumption <= 30) {

if (strcmp(CZ, "1/2") == 0) {

waterFee = 152.00 + 168.00 + (consumption - 20) \* 19.77;

} else if (strcmp(CZ, "3/4") == 0) {

waterFee = 243.20 + 168.00 + (consumption - 20) \* 19.77;

} else if (strcmp(CZ, "1") == 0) {

waterFee = 486.40 + 168.00 + (consumption - 20) \* 19.77;

} else if (strcmp(CZ, "11/2") == 0) {

waterFee = 1216.00 + 168.00 + (consumption - 20) \* 19.77;

} else if (strcmp(CZ, "2") == 0) {

waterFee = 3040.00 + 168.00 + (consumption - 20) \* 19.77;

}

} else {

if (strcmp(CZ, "1/2") == 0) {

waterFee = 152.00 + 168.00 + 197.70 + (consumption - 30) \* 48.40;

} else if (strcmp(CZ, "3/4") == 0) {

waterFee = 243.20 + 168.00 + 197.70 + (consumption - 30) \* 48.40;

} else if (strcmp(CZ, "1") == 0) {

waterFee = 486.40 + 168.00 + 197.70 + (consumption - 30) \* 48.40;

} else if (strcmp(CZ, "11/2") == 0) {

waterFee = 1216.00 + 168.00 + 197.70 + (consumption - 30) \* 48.40;

} else if (strcmp(CZ, "2") == 0) {

waterFee = 3040.00 + 168.00 + 197.70 + (consumption - 30) \* 48.40;

}

}

float franchiseTaxPercentage = 0.02;

float pcaPercentage = 0.4;

float pcwPercentage = 0.1;

franchiseTax = waterFee \* franchiseTaxPercentage;

pca = waterFee \* pcaPercentage;

pcw = waterFee \* pcwPercentage;

grossBill = waterFee + franchiseTax + pca + pcw;

} else if (strcmp(type, "communal") == 0) {

if (consumption <= 10) {

if (strcmp(code, "1/2") == 0) {

waterFee = 133.17;

}

} else if (consumption <= 20) {

waterFee = 133.17 + (consumption-10) \* 13.32;

} else if (consumption <= 30) {

waterFee = 133.17 + 133.2 + (consumption-20) \* 23.92;

} else {

waterFee = 133.37 + 133.2 + 239.2 + (consumption-30) \* 43.41;

}

float franchiseTaxPercentage = 0.02;

float pcaPercentage = 0.4;

float pcwPercentage = 0.1;

franchiseTax = waterFee \* franchiseTaxPercentage;

pca = waterFee \* pcaPercentage;

pcw = waterFee \* pcwPercentage;

grossBill = waterFee + franchiseTax + pca + pcw;

}

curpos(63, 13);

printf("%1.f", consumption);

curpos(40, 17);

printf("%.2f", waterFee);

curpos(40, 18);

printf("%.2f", franchiseTax);

curpos(40, 19);

printf("%.2f", pca);

curpos(40, 20);

printf("%.2f", pcw);

curpos(40, 21);

printf("%.2f", grossBill);

}

return 0;

}