PROJECT

Question : A (Society Water Bill MS) Society Water management system takes following input

1) House's Number

2) Contact person

3) House Age

4) Contact Number

5) Registry Status

6) Basic Rental Amount

7) Tax charged

8) House Type(Bungalow/Duplex/Flat)

9) Number of flats

10) Date of payment

11) Maintenance Tax

Based on above inputs it will display the total bill along with following

Condition

- If the house's age is above 5 years in the society then tax charged on basic rental is 5% of it.
- If the house type is bungalow then 4% extra tax is added for maintenance.
- 7% extra tax is added for maintenance for duplex house.
- 10% is charged if the number of flats at particular address exceeds 5.

Expected Output :

House Number	Contact Number	House Type	Registry Status	Basic Rental Amount
Number of flats	**Maintenance Tax**	**Date of payment**	**Tax added**	**Total amount to be payed**

Algorithm:

Step 1: Start.

Step 2: Create structure using following variable.

Step 2.1: Integer : HouseNo , HouseAge , Rent , HouseType , Noofflats.

Step 2.2: Character Array : Cperson , ContactNo , DOP.

Step 2.3: Character : RegStat.

Step 2.4: Floating Point : TaxCharged=0 , MantTax , TotalBill , TaxAdder.

Step 3: Take input from user according to question.

Step 4: Check for HouseAge>=5 if true goto step 4.1 else step 5.

Step 4.1: TaxAdder+=(5*Rent)/100;

Step 5: Check for HouseType if Bunglow goto step 5.1 else goto step 6.

Step 5.1: TaxAdder+=(4*MantTax)/100;

Step 6: Check for HouseType if Duplex goto step 6.1 else goto step 7.

Step 6.1: TaxAdder+=(7*MantTax)/100;

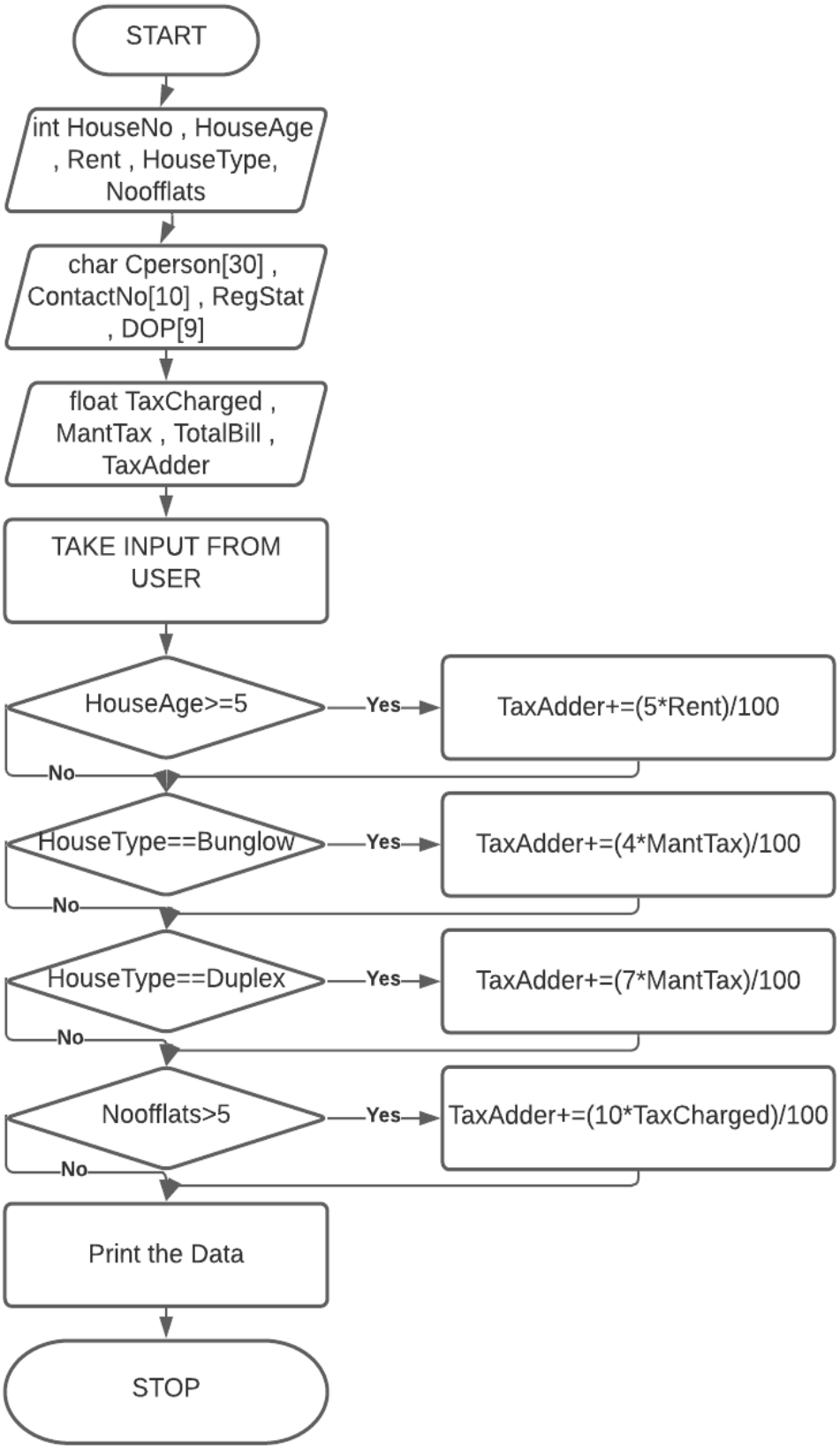
Step 7: Check if Noofflats>5 if true goto step 7.1 else goto step 8.

Step 7.1: TaxAdder+=(10*TaxCharged)/100;

Step 8: Print output according to question.

Step 10: Stop.

Flow Chat :


START
int HouseNo , HouseAge , Rent , HouseType, Noofflats
char Cperson[30] , ContactNo[10] , RegStat , DOP[9]
float TaxCharged , MantTax , TotalBill , TaxAdder
TAKE INPUT FROM USER
HouseAge>=5
Yes
TaxAdder+=(5*Rent)/100
No
HouseType==Bunglow
Yes
TaxAdder+=(4*MantTax)/100
No
HouseType==Duplex
Yes
TaxAdder+=(7*MantTax)/100
No
Noofflats>5
Yes
TaxAdder+=(10*TaxCharged)/100
No
Print the Data
STOP

Code :

```
/*
(Society Water Bill MS) Society Water management system takes following
input
1) House Number
2) Contact person
3) House Age
4) Contact Number
5) Registry Status
6) Basic Rental Amount
7) Tax charged
8) House Type(Bungalow/Duplex/Flat)
9) Number of flats
10) Date of payment
11) Maintenance Tax
Based on above inputs it will display the total bill along with following
condition
If the houses age is above 5 years in the society then tax charged
on basic rental is 5% of it.
If the house type is bungalow then 4% extra tax is added for
maintenance.
7% extra tax is added for maintenance for duplex house.
10% is charged if the number of flats at particular address
exceeds 5.
*/

//Header files
#include<stdio.h>
#include<conio.h>
#include<string.h>
```

```
struct socity
{
        int HouseNo , HouseAge , Rent , HouseType , Noofflats;
        char Cperson[30] , ContactNo[11] , RegStat , DOP[9] ;
        float TaxCharged , MantTax , TotalBill , TaxAdder;
}S[10];

int i=0;

void dummy();
void input();
void display(int i);
void displayall();
void search();

void main()
{
        int choice;
        do{
                clrscr();
                printf("----MENU-----");
                printf("\n1.NEW ENTERY");
                printf("\n2.SEARCH ENTERY");
                printf("\n3.PRINT ALL ENTERY");
                printf("\n4.EXIT");
                printf("\nEnter your choice : ");
                scanf("%d",&choice);
                switch(choice)
                {
                        case 1:
```

```
                    input();
                    break;
                case 2:
                    clrscr();
                    //printf("Hello");
                    search();
                    getch();
                    //printf("SEARCH");
                    break;
                case 3:
                    clrscr();
                    displayall();
                    //printf("Display all");
                    getch();
                    break;
                default :
                    choice=0;
            }
        }while(choice!=0);
}

void dummy(float *a)
{
        float b=*a;
        dummy(&b);
}

void input()
{
        float add=0;
        clrscr();
```

```
printf("Enter the House Number          : ");
printf("\nEnter the House Age            : ");
printf("\nEnter the House Rent           : ");
printf("\nEnter the Contact Person Name  : ");
printf("\nEnter the Contact Number       : ");
printf("\nEnter the Regesteration Status (Y/N) : ");
printf("\nEnter the Date of Payment (DDMMYYYY) : ");
printf("\nEnter the Tax Charged          : ");
printf("\nEnetr the Mantenance Tax       : ");
printf("\nEnter the House Type           : ");
printf("\n\t->Bunglow");
printf("\n\t->Duplex");
printf("\n\t->Flat");
gotoxy(50,1);
scanf("%d",&S[i].HouseNo);
gotoxy(50,2);
scanf("%d",&S[i].HouseAge);
gotoxy(50,3);
scanf("%d",&S[i].Rent);
gotoxy(50,4);
gets(S[i].Cperson);
gets(S[i].Cperson);
gotoxy(50,5);
gets(S[i].ContactNo);
gotoxy(50,6);
scanf("%c",&S[i].RegStat);
gotoxy(50,7);
gets(S[i].DOP);
gets(S[i].DOP);
gotoxy(50,8);
scanf("%f",&S[i].TaxCharged);
```

```
gotoxy(50,9);
scanf("%f",&S[i].MantTax);
gotoxy(50,10);
scanf("%d",&S[i].HouseType);
S[i].Noofflats=0;
if(S[i].HouseType==3)
{
        gotoxy(1,14);
        printf("Enter number of flats          : ");
        gotoxy(50,14);
        scanf("%d",&S[i].Noofflats);
        //printf("\n%d",S[i].Noofflats);
        //getch();
}
if(S[i].HouseType==1)
{
        //printf("\n%d",S[i].HouseType);
        add+=(4*S[i].MantTax)/100;
}
if(S[i].HouseType==2)
{
        //printf("\n%d",S[i].HouseType);
        add+=(7*S[i].MantTax)/100;
}
if(S[i].HouseAge>=5)
{
        //printf("\nHouse Age = %d",S[i].HouseAge);
        add+=(5*S[i].Rent)/100;
}
if(S[i].Noofflats>=5)
{
```

```
                add+=(10*S[i].TaxCharged)/100;
                //printf("%f",add);
        }
        S[i].TotalBill=S[i].TaxCharged+S[i].MantTax+add;
        //printf("\nT=%f\nA=%f",S[i].TotalBill,add);
        S[i].TaxAdder=add;
        //S[i].Noofflats=flats;
        //printf("\nT=%f\nA=%f",S[i].TotalBill,S[i].TaxAdder);
        display(i);
        ++i;
        getch();
}

void display(int j)
{
        char tl=218 , tr=191 , bl=192 , br=217 , hr=196 , vr=179 , RT=195 , LT=180 ,
TT=193 , BT=194 , P=197;
        int i;
        clrscr();
        gotoxy(3,7);
        printf("%c",tl);
        for(i=0 ; i<14 ; ++i)
        {
                printf("%c",hr);
        }
        printf("%c",BT);
        for(i=0 ; i<17 ; ++i)
        {
                printf("%c",hr);
        }
        printf("%c",BT);
```

```
for(i=0 ; i<11 ; ++i)
{
        printf("%c",hr);
}
printf("%c",BT);
for(i=0 ; i<13 ; ++i)
{
        printf("%c",hr);
}
printf("%c",BT);
for(i=0 ; i<12 ; ++i)
{
        printf("%c",hr);
}
printf("%c",tr);
gotoxy(3,8);
//printf("%c",vr);
printf("%c HOUSE %c REGISTRY %c HOUSE %c CONTACT %c BASIC %c",vr,vr,vr,vr,vr,vr);
gotoxy(3,9);
printf("%c NUMBER %c STATUS %c TYPE %c NUMBER %c RENT %c",vr,vr,vr,vr,vr,vr);
gotoxy(3,10);
printf("%c",RT);
for(i=0 ; i<14 ; ++i)
{
        printf("%c",hr);
}
printf("%c",P);
for(i=0 ; i<17 ; ++i)
{
```

```
            printf("%c",hr);
}
printf("%c",P);
for(i=0 ; i<11 ; ++i)
{
            printf("%c",hr);
}
printf("%c",P);
for(i=0 ; i<13 ; ++i)
{
            printf("%c",hr);
}
printf("%c",P);
for(i=0 ; i<12 ; ++i)
{
            printf("%c",hr);
}
printf("%c",LT);
gotoxy(3,11);
printf("%c",vr);
gotoxy(10,11);
printf("%d",S[j].HouseNo);
gotoxy(18,11);
printf("%c",vr);
gotoxy(28,11);
printf("%c",S[j].RegStat);
gotoxy(36,11);
printf("%c",vr);
gotoxy(42,11);
printf("%d",S[j].HouseType);
gotoxy(48,11);
```

```
printf("%c",vr);
gotoxy(50,11);
printf("%s",S[j].ContactNo);
gotoxy(62,11);
printf("%c",vr);
gotoxy(66,11);
printf("%d",S[j].Rent);
gotoxy(75,11);
printf("%c",vr);
gotoxy(3,12);
printf("%c",RT);
for(i=0 ; i<14 ; ++i)
{
        printf("%c",hr);
}
printf("%c",P);
for(i=0 ; i<17 ; ++i)
{
        printf("%c",hr);
}
printf("%c",P);
for(i=0 ; i<11 ; ++i)
{
        printf("%c",hr);
}
printf("%c",P);
for(i=0 ; i<13 ; ++i)
{
        printf("%c",hr);
}
printf("%c",P);
```

```
for(i=0 ; i<12 ; ++i)
{
        printf("%c",hr);
}
printf("%c",LT);
gotoxy(3,13);
printf("%c NUMBER %c MAINTENANCE %c TAX %c DATE OF %c TOTAL %c",vr,vr,vr,vr,vr,vr);
gotoxy(3,14);
printf("%c OF FLATS %c TAX %c ADDED %c PAYMENT %c AMOUNT %c",vr,vr,vr,vr,vr,vr);
gotoxy(3,15);
printf("%c",RT);
for(i=0 ; i<14 ; ++i)
{
        printf("%c",hr);
}
printf("%c",P);
for(i=0 ; i<17 ; ++i)
{
        printf("%c",hr);
}
printf("%c",P);
for(i=0 ; i<11 ; ++i)
{
        printf("%c",hr);
}
printf("%c",P);
for(i=0 ; i<13 ; ++i)
{
        printf("%c",hr);
```

```
}
printf("%c",P);
for(i=0 ; i<12 ; ++i)
{
        printf("%c",hr);
}
printf("%c",LT);
gotoxy(3,16);
printf("%c",vr);
gotoxy(11,16);
printf("%d",S[j].Noofflats);
gotoxy(18,16);
printf("%c",vr);
gotoxy(22,16);
printf("%f",S[j].MantTax);
gotoxy(36,16);
printf("%c",vr);
gotoxy(38,16);
printf("%f",S[j].TaxAdder);
gotoxy(48,16);
printf("%c",vr);
gotoxy(51,16);
printf("%s",S[j].DOP);
gotoxy(62,16);
printf("%c",vr);
gotoxy(64,16);
printf("%f",S[j].TotalBill);
gotoxy(75,16);
printf("%c",vr);
gotoxy(3,17);
printf("%c",bl);
```

```
        for(i=0 ; i<14 ; ++i)
        {
                printf("%c",hr);
        }
        printf("%c",TT);
        for(i=0 ; i<17 ; ++i)
        {
                printf("%c",hr);
        }
        printf("%c",TT);
        for(i=0 ; i<11 ; ++i)
        {
                printf("%c",hr);
        }
        printf("%c",TT);
        for(i=0 ; i<13 ; ++i)
        {
                printf("%c",hr);
        }
        printf("%c",TT);
        for(i=0 ; i<12 ; ++i)
        {
                printf("%c",hr);
        }
        printf("%c",br);
        gotoxy(27,18);
        printf("ENTER ANY KEY TO CONTINUE...");
}

void displayall()
{
```

```
char tl=218 , tr=191 , bl=192 , br=217 , hr=196 , vr=179 , RT=195 , LT=180 , TT=193 , BT=194 , P=197;
int i;
clrscr();
printf("%c",tl);
for(i=0 ; i<6 ; ++i)
{
        printf("%c",hr);
}
printf("%c",BT);
for(i=0 ; i<14 ; ++i)
{
        printf("%c",hr);
}
printf("%c",BT);
for(i=0 ; i<17 ; ++i)
{
        printf("%c",hr);
}
printf("%c",BT);
for(i=0 ; i<20 ; ++i)
{
        printf("%c",hr);
}
printf("%c",BT);
for(i=0 ; i<17 ; ++i)
{
        printf("%c",hr);
}
printf("%c",tr);
```

```
        printf("%c SNo. %c    NAME    %c  CONTACT NO.  %c DATE OF PAYMENT
%c   TOTAL BILL   %c",vr,vr,vr,vr,vr,vr);
        printf("%c",RT);
        for(i=0 ; i<6 ; ++i)
        {
                printf("%c",hr);
        }
        printf("%c",P);
        for(i=0 ; i<14 ; ++i)
        {
                printf("%c",hr);
        }
        printf("%c",P);
        for(i=0 ; i<17 ; ++i)
        {
                printf("%c",hr);
        }
        printf("%c",P);
        for(i=0 ; i<20 ; ++i)
        {
                printf("%c",hr);
        }
        printf("%c",P);
        for(i=0 ; i<17 ; ++i)
        {
                printf("%c",hr);
        }
        printf("%c",LT);
        for(i=0 ; i<::i ; ++i)
        {
                gotoxy(1,i+4);
```

```
            printf("%c",vr);
            gotoxy(8,i+4);
            printf("%c",vr);
            gotoxy(23,i+4);
            printf("%c",vr);
            gotoxy(41,i+4);
            printf("%c",vr);
            gotoxy(62,i+4);
            printf("%c",vr);
            gotoxy(80,i+4);
            printf("%c",vr);
            gotoxy(4,i+4);
            printf("%d",i+1);
            gotoxy(11,i+4);
            printf("%s",S[i].Cperson);
            gotoxy(28,i+4);
            printf("%s",S[i].ContactNo);
            gotoxy(49,i+4);
            printf("%s",S[i].DOP);
            gotoxy(65,i+4);
            printf("%f",S[i].TotalBill);
}
gotoxy(1,i+4);
printf("%c",bl);
for(i=0 ; i<6 ; ++i)
{
            printf("%c",hr);
}
printf("%c",TT);
for(i=0 ; i<14 ; ++i)
{
```

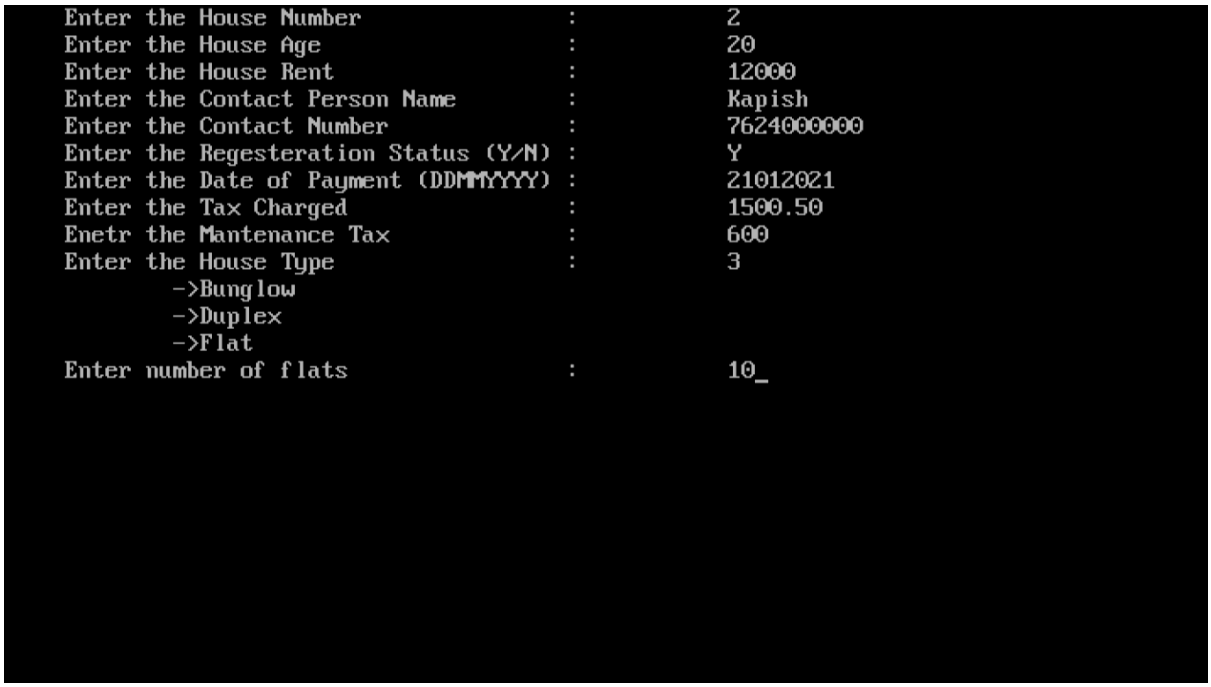
```
                printf("%c",hr);
        }
        printf("%c",TT);
        for(i=0 ; i<17 ; ++i)
        {
                printf("%c",hr);
        }
        printf("%c",TT);
        for(i=0 ; i<20 ; ++i)
        {
                printf("%c",hr);
        }
        printf("%c",TT);
        for(i=0 ; i<17 ; ++i)
        {
                printf("%c",hr);
        }
        printf("%c",br);
}

void search()
{
        char name[30];
        int i , flag=0;
        printf("Enter the Person Name to Search : ");
        gets(name);
        gets(name);
        for(i=0 ; i<::i ; ++i)
        {
                if(strcmp(name,S[i].Cperson)==0)
                {
```

```
                    display(i);
                    flag=1;
                    break;
                }
        }
        if(flag==0)
        {
                printf("\nSorry Data Not Found For Person Searched %s",name);
        }
}
```

Output :

1) Menu

2) New Entery : First Entery



3)Output of First Entery

HOUSE NUMBER	REGISTRY STATUS	HOUSE TYPE	CONTACT NUMBER	BASIC RENT
2	Y	3	7624000000	12000
NUMBER OF FLATS	MAINTENANCE TAX	TAX ADDED	DATE OF PAYMENT	TOTAL AMOUNT
10	600.000000	95.050003	21012021	2195.550049

ENTER ANY KEY TO CONTINUE..._

4)New Enter : Second Entery

```
Enter the House Number              :          38
Enter the House Age                 :          5
Enter the House Rent                :          15000
Enter the Contact Person Name       :          Krupal Patel
Enter the Contact Number            :          7624010000
Enter the Regesteration Status (Y/N) :         N
Enter the Date of Payment (DDMMYYYY) :         30012021
Enter the Tax Charged               :          2000
Enetr the Mantenance Tax            :          650
Enter the House Type                :          1_
        ->Bunglow
        ->Duplex
        ->Flat
```

5)Output for Second Entery

HOUSE NUMBER	REGISTRY STATUS	HOUSE TYPE	CONTACT NUMBER	BASIC RENT
38	N	1	7624010000	15000
NUMBER OF FLATS	MAINTENANCE TAX	TAX ADDED	DATE OF PAYMENT	TOTAL AMOUNT
0	650.000000	120.000000	30012021	2770.000000

ENTER ANY KEY TO CONTINUE...

5)Search for entery Kapish

```
Enter the Person Name to Search : Kapish
```

6)Output for Search

HOUSE NUMBER	REGISTRY STATUS	HOUSE TYPE	CONTACT NUMBER	BASIC RENT
2	Y	3	7624000000	12000
NUMBER OF FLATS	MAINTENANCE TAX	TAX ADDED	DATE OF PAYMENT	TOTAL AMOUNT
10	600.000000	95.050003	21012021	2195.550049

ENTER ANY KEY TO CONTINUE...

7)Print all entery

SNo.	NAME	CONTACT NO.	DATE OF PAYMENT	TOTAL BILL
1	Kapish	7624000000	21012021	2195.550049
2	Krupal Patel	7624010000	30012021	2770.000000

THE END