## **Introduction:-**

Telecom billing system a system that provides the facility to calculate calling charges as per users calling minutes even if it is local calling or STD callings.

This system is very useful for common man as well as businessman as they don't have time to calculate the total charges on notebook or considering the charges per minute on either STD or locals. It has scope to reduce the errors in making billing.

This project is based on 'C'. In the source code, we have used if statements as well as library functions. In this program, user has to input its name and address. Then user has to input local calling minutes and STD calling minutes. Finally the bill will be displayed in rupees (Indian currency).

# **Frontend:-**

'C' is the basic and high level programming language. It is a very easy programming language to learn. The code looks a lot like English Language. Different software companies produced different compilers such as turbo c & c++, C frame, Code blocks etc. However people prefer to use turbo C as it is a well-developed and most used compiler.

## Algorithm:-

**Step 1:** start

**Step 2:** Declare variables for minutes, charges etc.

**Step 3**: Enter values for minutes

**Step 4:** Read values.

**Step 5:** Fix the charges for STD and Local minutes.

**Step 6**: If local minutes are greater than 50 then go to step 8

**Step** 7: If local minutes are less than 50 then go to step 9

**Step 8**: Apply charges for minutes that exceed 50 minutes.

**Step 9:** Don't apply charges for Local minutes.

**Step 10:** Add STD charges, Local charges and fix rate.

**Step 11:** Display the final charges.

Step 12: End

# Flowchart of the program:-Start Declare variables for minutes, charges, total charges Enter the values for minutes Read the values If Local min>50 True false chargeable minutes= Chargeable minutes=0 total minutes-50 Display total charges for local calling and STD callings

Stop

#### **Source-Code:-**

```
#include<stdio.h>
#include<conio.h>
#include<string.h>
void main()
int fix=25,stdmin,locmin,ch_locmin;
char name[20],add[50];
float stdcall_charge,loccall_charge,tot_bill;
char ch;
clrscr();
       printf("\n\nThe fix rate of telephone billing is 25rs/-month");
       printf("\n\nThe calling rate for STd calls is 1.2rs per minute");
       printf("\n\nTha calling rate for Local calls is 0.8rs per minute");
       printf("\n\nFirst 50 minutes are charge free for Local calling");
       printf("\n\nEnter your name");
       gets(name);
       printf("\nEnter your address in short");
       gets(add);
       printf("\n\nEnter your monthly STD calling minutes");
       scanf("%d",&stdmin);
       printf("\n\nEnter your monthly local calling minutes");
       scanf("%d",&locmin);
       if(locmin>50)
```

```
{
         ch_locmin=locmin-50;
      else
        ch_locmin=0;
      stdcall_charge=1.2*stdmin;
      loccall_charge=0.8*ch_locmin;
      tot_bill=stdcall_charge+loccall_charge+fix;
      printf("\n\nName:-%s",name);
      printf("\n\nAddress:-%s",add);
      printf("\n\nSTD calling rate:=%0.2fRs/-",stdcall_charge);
      printf("\n\nLocal calling rate:=%0.2fRs/-",loccall_charge);
      printf("\n\nThe total calling charge of month is
      %0.2f Rs/-",tot_bill);
getch();
 }
```

#### **Program Output:-**

```
The fix rate of telephone billing is 25rs/-month
The calling rate for STd calls is 1.2rs per minute
Tha calling rate for Local calls is 0.8rs per minute
First 50 minutes are charge free for Local calling
Enter your name Subhash Chandra
Enter your address in short Kolhapur
Enter your monthly STD calling minutes 1000
Enter your monthly local calling minutes 500

Name:- Subhash Chandra
Address:- Kolhapur
STD calling rate:=200.00Rs/-
Local calling rate:=60.90Rs/-
The total calling charge of month is 585.00 Rs/-_
```

## **Advantages:**

- 1] We have designed this telecom billing system in 'c' to automate the billing rate of monthly calling minutes.
- 2] This project is useful for day-to-day life as well as businessman's life.
- 3] In this project, user has to input monthly STD calling minutes and Local calling minutes. As output, user will get the total amount of calling charges.

## **Conclusion:**

The project is designed to meet the requirement of telecom billing systems. It has been developed in 'C' keeping in mind the specification of system,

For designing this program, we have used simple flowchart and algorithm. Overall the project teaches us the essential skills like:

Understand the various flow of instructions.

## **Reference:-**

We have taken the help of our course books and internet. We are also referred the reference books available in college library.

https://www.codingunit.com/c-tutorial-strings-and-string-library-functions https://www.programiz.com/c-programming/c-if-else-statement https://www.studytonight.com/c/string-and-character-array.php

## Reference books:-

"The C Programming Language" by Brian W Kernighan