

```
// Answer on Question#38412 - Programming - C++
```

```
#include <conio.h>
```

```
#include <iostream>
```

```
#include <fstream>
```

```
#include <string.h>
```

```
using namespace std;
```

```
// The record of the telephone book
```

```
struct Telerec
```

```
{
```

```
    char name[20];
```

```
    char telNumber[10];
```

```
};
```

```
// The name of the file with telephone records
```

```
const char * FILE_NAME = "telerec.dat";
```

```
// Shows the main menu of the program on console
```

```
void print_main_menu();
```

```
// Inserting telephone record
```

```
void insert_new_record();
```

```
// Searching
```

```
void search_for_record();
```

```
// The main function of the program - the entry point of the program
```

```
int main()
{
    system("cls");
    char action;
    bool print_menu = true;
    system("cls");

    do
    {
        if (print_menu)
        {
            print_main_menu();
        }
        action = getch();           // read pressed key to choose some action
        print_menu = true;
        switch (action)             // choosing the action by pressed key
        {
            case '1':
            {
                insert_new_record();
                break;
            }
            case '2':
            {
                search_for_record();
                break;
            }
            default:
```

```

        print_menu = false;    // if pressed not valid action, it is not need to show
main menu again
    }
}
while (action != '3');

return 0;
}

```

// Shows the main menu of the program on console

```

void print_main_menu()
{
    cout << "Choose the action:\n";
    cout << "-----\n\n";
    cout << "1. Append telephone number\n";
    cout << "2. Display the telephone number for a given name\n";
    cout << "3. Exit\n";
    cout << "\tTo do any of the previous functions please enter its number :\n";
}

```

// Inserting telephone record

```

void insert_new_record()
{
    Telerec record;
    cout << "\n----Inserting new record----";
    cout << "\nEnter the name: ";
    cin >> record.name;
    cout << "Enter the telephone number: ";
    cin >> record.telNumber;
}

```

```

    ofstream out(FILE_NAME, ios::binary);
    out.write((char *) &record, sizeof(Telerec));
    out.close();
    cout << ("The record was succesfully added!\n\n");
}

// Searching
void search_for_record()
{
    cout << endl << "\n-----Searching for record-----\n" << endl;
    cout << "Enter the name: ";
    char name[20];
    cin >> name;
    ifstream in(FILE_NAME);
    if (!in)
    {
        cout << "The file is empty!";
        return;
    }

    Telerec record;
    while (!in.eof())
    {
        in.read((char *) &record, sizeof(Telerec));
        if (strcmp(name, record.name) == 0)
        {
            cout << "Teephone number: " << record.telNumber << endl << endl;
            return;          // When found the record, return the function
        }
    }
}

```

```
        }  
    }  
  
    cout << "\nRecord not found!\n\n";  
}
```