**#include <iostream>**

**#include <string>**

**#include <vector>**

**#include <algorithm>**

**struct Birthday {**

**std::string name;**

**int birthMonth;**

**int birthDay;**

**int birthYear;**

**};**

**void displayBirthdayList(const std::vector<Birthday>& birthdays) {**

**std::cout << "Birthday List:\n";**

**for (const auto& entry : birthdays) {**

**std::cout << entry.name << ": " << entry.birthMonth << "/"**

**<< entry.birthDay << "/" << entry.birthYear << std::endl;**

**}**

**}**

**int searchBirthday(const std::vector<Birthday>& birthdays, const std::string& searchName) {**

**auto it = std::find\_if(birthdays.begin(), birthdays.end(),**

**[searchName](const Birthday& b) { return b.name == searchName; });**

**if (it != birthdays.end()) {**

**return std::distance(birthdays.begin(), it);**

**} else {**

**return -1;**

**}**

**}**

**void displayMonthlyBirthdays(const std::vector<Birthday>& birthdays, int month) {**

**std::cout << "\nBirthdays in Month " << month << ":\n";**

**for (const auto& entry : birthdays) {**

**if (entry.birthMonth == month) {**

**std::cout << entry.name << ": " << entry.birthMonth << "/"**

**<< entry.birthDay << "/" << entry.birthYear << std::endl;**

**}**

**}**

**}**

**int main() {**

**std::vector<Birthday> birthdays;**

**// Create/Edit birthdays**

**for (int i = 0; i < 5; ++i) {**

**Birthday entry;**

**std::cout << "Enter details for loved one " << i + 1 << ":\n";**

**std::cout << "Name: ";**

**std::getline(std::cin >> std::ws, entry.name);**

**std::cout << "Birth month (1-12): ";**

**std::cin >> entry.birthMonth;**

**std::cout << "Birth day: ";**

**std::cin >> entry.birthDay;**

**std::cout << "Birth year: ";**

**std::cin >> entry.birthYear;**

**birthdays.push\_back(entry);**

**}**

**// Display all birthdays**

**displayBirthdayList(birthdays);**

**// Search option**

**std::string searchName;**

**std::cout << "\nEnter a name to search: ";**

**std::getline(std::cin >> std::ws, searchName);**

**int index = searchBirthday(birthdays, searchName);**

**if (index != -1) {**

**std::cout << "Birthday found:\n";**

**displayBirthdayList({birthdays[index]});**

**} else {**

**std::cout << "Birthday not found.\n";**

**}**

**// Display monthly birthdays**

**int searchMonth;**

**std::cout << "\nEnter a month to display birthdays: ";**

**std::cin >> searchMonth;**

**displayMonthlyBirthdays(birthdays, searchMonth);**

**return 0;**

**}**