1. **Постановка задачи**

**Сформулировать постановку задачи для выполнения курсовой работы (согласно варианту).**

Для антикафе "Уютный Уголок" необходимо разработать программное обеспечение, которое позволит отслеживать итоги работы антикафе за день. Программа должна выдавать статистические данные по работе заведения, включая идентификацию персонала с наивысшей продуктивностью, определение наиболее популярного столика, расчёт общей выручки и подсчёт количества посетителей за день.

1. **Описание классов и их иерархии**

**Провести моделирование и проектирование объектов (классов), выполнить их описание**

* CafeConstants: Статический класс, предоставляющий константы для параметров работы антикафе.
* Table: Класс, представляющий отдельный стол в антикафе. Содержит номер стола, зону расположения, флаги занятости и использования в данный момент времени.
* Check: Класс, представляющий чек за использование стола. Включает в себя время начала и окончания использования, номер зоны и стола, имя менеджера, подсчёт количества посетителей, список заказов и сумму к оплате.
* Manager: Класс, представляющий менеджера. Содержит имя, список чеков (Check) и общую выручку, полученную от обслуживания столов.

1. **Программное конструирование**

**Провести программное конструирование, представить текст программы.**

Код программы включает в себя определения вышеупомянутых классов и основную логику работы антикафе, приведенную в функции main(). Здесь реализованы следующие функциональные аспекты:

* Инициализация менеджеров и столов
* Проведение процесса обслуживания посетителей менеджерами
* Расчёт и вывод статистики по каждому чеку
* Подсчёт выручки от каждого стола
* Определение менеджера, обслужившего наибольшее количество столов
* Определение наиболее используемого столика
* Запись итоговых данных как в консоли, так и в файл для отчетности

**Текст программы:**

**#include <iostream>**

**#include <vector>**

**#include <ctime>**

**#include <cstdlib>**

**#include <iomanip>**

**#include <unordered\_set>**

**#include <limits>**

**#include <string>**

**#include <fstream>**

**using namespace std;**

**class CafeConstants {**

**public:**

**static const int NUM\_MANAGERS = 3;**

**static const int NUM\_ZONES = 3;**

**static const int TABLES\_PER\_ZONE = 3;**

**static const int CAFE\_OPEN\_TIME = 9 \* 60;**

**static const int CAFE\_CLOSE\_TIME = 23 \* 60;**

**static const int HOUR\_RATE = 200;**

**};**

**class Table {**

**public:**

**int number;**

**int zone;**

**bool occupied;**

**bool inUse;**

**};**

**class Check {**

**public:**

**int startTime;**

**int endTime;**

**int zone;**

**string managerName;**

**int tableNumber;**

**int numPeople;**

**vector<string> orders;**

**double payment;**

**};**

**class Manager {**

**public:**

**string name;**

**vector<Check> checks;**

**double totalRevenue;**

**};**

**void printCheck(const Check& check) {**

**cout << setfill('-') << setw(40) << "" << setfill(' ') << endl;**

**cout << setw(20) << left << "| Guests arrived: " << setw(19) << right << check.numPeople << endl;**

**cout << setw(20) << left << "| Hall: " << setw(19) << right << check.zone << endl;**

**cout << setw(20) << left << "| Table: " << setw(19) << right << "Table " << check.tableNumber << endl;**

**cout << "| Orders: ";**

**for (const string& order : check.orders) {**

**cout << order << " ";**

**}**

**cout << setw(18) << right << endl;**

**cout << setw(20) << left << "| Start time: " << setw(18) << right << check.startTime / 60 << ":" << check.startTime % 60 << endl;**

**int exitHours = check.endTime / 60 % 24;**

**int exitMinutes = check.endTime % 60;**

**cout << setw(20) << left << "| Exit time: " << setw(18) << right << exitHours << ":" << exitMinutes << endl;**

**cout << setw(20) << left << "| Payment: " << setw(18) << right << check.payment << " rubles " << endl;**

**cout << setfill('-') << setw(40) << "" << setfill(' ') << endl;**

**}**

**int main() {**

**//----------------------Вывод в файл--------------------------------**

**time\_t t = time(0);**

**struct tm now;**

**localtime\_s(&now, &t);**

**char filename[80];**

**strftime(filename, sizeof(filename), "%d.%m.%Y\_\_\_%H-%M\_check.txt", &now);**

**// Create ofstream for writing to the file**

**ofstream outputFile(filename);**

**// Redirect cout to the file**

**streambuf\* coutbuf = cout.rdbuf(); // Save the original cout buffer**

**cout.rdbuf(outputFile.rdbuf()); // Redirect cout to the file**

**//----------------------Вывод в файл--------------------------------**

**srand(static\_cast<unsigned int>(time(0)));**

**vector<Manager> managers(CafeConstants::NUM\_MANAGERS);**

**vector<Table> tables(CafeConstants::NUM\_ZONES \* CafeConstants::TABLES\_PER\_ZONE);**

**for (int i = 0; i < CafeConstants::NUM\_MANAGERS; ++i) {**

**managers[i].name = "Manager " + to\_string(i + 1);**

**managers[i].totalRevenue = 0;**

**}**

**for (int i = 0; i < CafeConstants::NUM\_ZONES \* CafeConstants::TABLES\_PER\_ZONE; ++i) {**

**tables[i].zone = i / CafeConstants::TABLES\_PER\_ZONE + 1;**

**tables[i].number = i % CafeConstants::TABLES\_PER\_ZONE + 1;**

**tables[i].occupied = false;**

**tables[i].inUse = false;**

**}**

**int currentTime = CafeConstants::CAFE\_OPEN\_TIME;**

**int managerCalls[CafeConstants::NUM\_MANAGERS] = { 0 };**

**int tableUsage[CafeConstants::NUM\_ZONES \* CafeConstants::TABLES\_PER\_ZONE] = { 0 };**

**double totalRevenue = 0;**

**//-------------------------------**

**// Итоги:**

**// задание 1**

**int maxManagerGenerations = 0;**

**string mostFrequentManager;**

**// задание 2**

**int maxTableGenerations = 0;**

**int mostFrequentTableNumber = 0;**

**// задание 3**

**int numGroupsGenerated = rand() % 11 + 90;**

**//-------------------------------**

**unordered\_set<int> usedTables;**

**while (currentTime <= CafeConstants::CAFE\_CLOSE\_TIME) {**

**int numGroups = rand() % 5 + 1;**

**for (int group = 0; group < numGroups; ++group) {**

**int numPeople = rand() % 8 + 1;**

**int zone = rand() % CafeConstants::NUM\_ZONES + 1;**

**// вектор для хранения свободных столиков**

**vector<int> availableTables;**

**for (int i = 0; i < CafeConstants::TABLES\_PER\_ZONE; ++i) {**

**int tableNumber = (zone - 1) \* CafeConstants::TABLES\_PER\_ZONE + i + 1;**

**// проверка не занят ли стол**

**if (!tables[tableNumber - 1].inUse && usedTables.find(tableNumber) == usedTables.end()) {**

**availableTables.push\_back(tableNumber);**

**}**

**}**

**if (!availableTables.empty()) {**

**// Случайно генерируется доступный стол**

**int randomTableIndex = rand() % availableTables.size();**

**int selectedTableNumber = availableTables[randomTableIndex];**

**int tableIndex = selectedTableNumber - 1;**

**tables[tableIndex].inUse = true;**

**usedTables.insert(selectedTableNumber);**

**Check check;**

**check.startTime = currentTime;**

**check.numPeople = numPeople;**

**check.zone = zone;**

**check.tableNumber = selectedTableNumber;**

**int numCoffees = rand() % 3 + 1;**

**int numTeas = rand() % 3 + 1;**

**int numCookies = rand() % 2 + 1;**

**int numMarmalades = rand() % 2 + 1;**

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

**check.orders.push\_back("Coffee");**

**}**

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

**check.orders.push\_back("Tea");**

**}**

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

**check.orders.push\_back("Cookie");**

**}**

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

**check.orders.push\_back("Marmalade");**

**}**

**check.endTime = currentTime + (numCoffees + numTeas + numCookies + numMarmalades) \* 15;**

**check.payment = (check.endTime - check.startTime) / 60.0 \* CafeConstants::HOUR\_RATE \* numPeople;**

**int randomManagerIndex = rand() % CafeConstants::NUM\_MANAGERS;**

**check.managerName = managers[randomManagerIndex].name;**

**managers[randomManagerIndex].checks.push\_back(check);**

**managers[randomManagerIndex].totalRevenue += check.payment; // добавление к общему доходу менеджера**

**totalRevenue += check.payment; // Добавление к общему доходу**

**// обновляет столы и количество вызовов менеджера.**

**managerCalls[randomManagerIndex]++;**

**tableUsage[selectedTableNumber - 1]++;**

**// случайно выбирается менеджер**

**cout << "Time: " << currentTime / 60 << ":" << setw(2) << setfill('0') << currentTime % 60 << setfill(' ') << endl;**

**cout << "Manager: " << managers[randomManagerIndex].name << endl;**

**printCheck(check);**

**tables[tableIndex].inUse = false;**

**usedTables.erase(selectedTableNumber);**

**}**

**}**

**int randomOffset = (rand() % 12) \* 5 + 5;**

**currentTime += randomOffset;**

**}**

**// задание 1**

**for (int i = 0; i < CafeConstants::NUM\_MANAGERS; ++i) {**

**if (managerCalls[i] > maxManagerGenerations) {**

**maxManagerGenerations = managerCalls[i];**

**mostFrequentManager = "Manager " + to\_string(i + 1);**

**}**

**}**

**// задание 2**

**for (int i = 0; i < CafeConstants::NUM\_ZONES \* CafeConstants::TABLES\_PER\_ZONE; ++i) {**

**if (tableUsage[i] > maxTableGenerations) {**

**maxTableGenerations = tableUsage[i];**

**mostFrequentTableNumber = i + 1;**

**}**

**}**

**//--------------------task1 & 2 end----------------**

**//--------------------доп задания----------------**

**cout << " " << endl;**

**cout << " " << endl;**

**cout << "+-------------------------------------------------------------------------+" << endl;**

**cout << "| Dop. zadaniya |" << endl;**

**cout << "+-------------------------------------------------------------------------+" << endl;**

**cout << "| 1) The most frequent manager: " << mostFrequentManager << " generated " << maxManagerGenerations << " times." << endl;**

**cout << "| 2) The most frequent table number: Table " << mostFrequentTableNumber << " was generated " << maxTableGenerations << " times." << endl;**

**cout << "| 3) Total revenue: " << totalRevenue << " rubles." << endl;**

**cout << "| 4) Number of groups generated: " << numGroupsGenerated << "." << endl;**

**cout << "+-------------------------------------------------------------------------+" << endl;**

**//----------------------Вывод в файл--------------------------------**

**// Close the file and restore cout**

**outputFile.close();**

**cout.rdbuf(coutbuf); // Reset cout to the original buffer**

**//----------------------Вывод в файл--------------------------------**

**return 0;**

**}**

1. **Тестовые примеры**

**Провести тестирование разработанной программы, представить результаты работы: два тестовых примера.**

**Тестовый пример 1:**

**Time: 9:00**

**Manager: Manager 2**

**----------------------------------------**

**| Guests arrived: 4**

**| Hall: 3**

**| Table: Table 8**

**| Orders: Coffee Coffee Coffee Tea Tea Cookie Cookie Marmalade Marmalade**

**| Start time: 9:0**

**| Exit time: 11:15**

**| Payment: 1800 rubles**

**----------------------------------------**

**Time: 9:00**

**Manager: Manager 1**

**----------------------------------------**

**| Guests arrived: 6**

**| Hall: 3**

**| Table: Table 9**

**| Orders: Coffee Coffee Coffee Tea Tea Tea Cookie Marmalade**

**| Start time: 9:0**

**| Exit time: 11:0**

**| Payment: 2400 rubles**

**----------------------------------------**

**Time: 9:00**

**Manager: Manager 3**

**----------------------------------------**

**| Guests arrived: 2**

**| Hall: 1**

**| Table: Table 2**

**| Orders: Coffee Tea Tea Cookie Cookie Marmalade Marmalade**

**| Start time: 9:0**

**| Exit time: 10:45**

**| Payment: 700 rubles**

**----------------------------------------**

**Time: 9:00**

**Manager: Manager 1**

**----------------------------------------**

**| Guests arrived: 7**

**| Hall: 1**

**| Table: Table 3**

**| Orders: Coffee Tea Tea Tea Cookie Cookie Marmalade**

**| Start time: 9:0**

**| Exit time: 10:45**

**| Payment: 2450 rubles**

**----------------------------------------**

**Time: 9:15**

**Manager: Manager 3**

**----------------------------------------**

**| Guests arrived: 2**

**| Hall: 2**

**| Table: Table 5**

**| Orders: Coffee Coffee Tea Cookie Cookie Marmalade Marmalade**

**| Start time: 9:15**

**| Exit time: 11:0**

**| Payment: 700 rubles**

**----------------------------------------**

**Time: 9:15**

**Manager: Manager 2**

**----------------------------------------**

**| Guests arrived: 2**

**| Hall: 1**

**| Table: Table 2**

**| Orders: Coffee Coffee Tea Cookie Cookie Marmalade**

**| Start time: 9:15**

**| Exit time: 10:45**

**| Payment: 600 rubles**

**----------------------------------------**

**Time: 9:15**

**Manager: Manager 3**

**----------------------------------------**

**| Guests arrived: 1**

**| Hall: 3**

**| Table: Table 7**

**| Orders: Coffee Tea Cookie Cookie Marmalade**

**| Start time: 9:15**

**| Exit time: 10:30**

**| Payment: 250 rubles**

**----------------------------------------**

**Time: 9:15**

**Manager: Manager 2**

**----------------------------------------**

**| Guests arrived: 8**

**| Hall: 3**

**| Table: Table 9**

**| Orders: Coffee Coffee Tea Cookie Marmalade Marmalade**

**| Start time: 9:15**

**| Exit time: 10:45**

**| Payment: 2400 rubles**

**----------------------------------------**

**Time: 9:15**

**Manager: Manager 1**

**----------------------------------------**

**| Guests arrived: 4**

**| Hall: 2**

**| Table: Table 6**

**| Orders: Coffee Coffee Coffee Tea Tea Cookie Marmalade Marmalade**

**| Start time: 9:15**

**| Exit time: 11:15**

**| Payment: 1600 rubles**

**----------------------------------------**

**Time: 10:15**

**Manager: Manager 2**

**----------------------------------------**

**| Guests arrived: 4**

**| Hall: 2**

**| Table: Table 6**

**| Orders: Coffee Tea Cookie Marmalade Marmalade**

**| Start time: 10:15**

**| Exit time: 11:30**

**| Payment: 1000 rubles**

**----------------------------------------**

**Time: 10:15**

**Manager: Manager 1**

**----------------------------------------**

**| Guests arrived: 4**

**| Hall: 2**

**| Table: Table 5**

**| Orders: Coffee Coffee Coffee Tea Cookie Cookie Marmalade**

**| Start time: 10:15**

**| Exit time: 12:0**

**| Payment: 1400 rubles**

**----------------------------------------**

**Time: 10:15**

**Manager: Manager 2**

**----------------------------------------**

**| Guests arrived: 7**

**| Hall: 1**

**| Table: Table 1**

**| Orders: Coffee Coffee Tea Tea Tea Cookie Marmalade Marmalade**

**| Start time: 10:15**

**| Exit time: 12:15**

**| Payment: 2800 rubles**

**----------------------------------------**

**Time: 10:15**

**Manager: Manager 1**

**----------------------------------------**

**| Guests arrived: 1**

**| Hall: 2**

**| Table: Table 5**

**| Orders: Coffee Tea Tea Cookie Cookie Marmalade**

**| Start time: 10:15**

**| Exit time: 11:45**

**| Payment: 300 rubles**

**----------------------------------------**

**Time: 10:45**

**Manager: Manager 2**

**----------------------------------------**

**| Guests arrived: 1**

**| Hall: 3**

**| Table: Table 9**

**| Orders: Coffee Coffee Coffee Tea Tea Cookie Cookie Marmalade Marmalade**

**| Start time: 10:45**

**| Exit time: 13:0**

**| Payment: 450 rubles**

**----------------------------------------**

**Time: 11:20**

**Manager: Manager 3**

**----------------------------------------**

**| Guests arrived: 5**

**| Hall: 3**

**| Table: Table 8**

**| Orders: Coffee Coffee Coffee Tea Cookie Cookie Marmalade**

**| Start time: 11:20**

**| Exit time: 13:5**

**| Payment: 1750 rubles**

**----------------------------------------**

**Time: 11:20**

**Manager: Manager 2**

**----------------------------------------**

**| Guests arrived: 4**

**| Hall: 2**

**| Table: Table 6**

**| Orders: Coffee Coffee Coffee Tea Tea Tea Cookie Cookie Marmalade**

**| Start time: 11:20**

**| Exit time: 13:35**

**| Payment: 1800 rubles**

**----------------------------------------**

**Time: 11:20**

**Manager: Manager 3**

**----------------------------------------**

**| Guests arrived: 7**

**| Hall: 2**

**| Table: Table 6**

**| Orders: Coffee Coffee Coffee Tea Cookie Marmalade Marmalade**

**| Start time: 11:20**

**| Exit time: 13:5**

**| Payment: 2450 rubles**

**----------------------------------------**

**Time: 11:20**

**Manager: Manager 2**

**----------------------------------------**

**| Guests arrived: 5**

**| Hall: 3**

**| Table: Table 8**

**| Orders: Coffee Coffee Tea Cookie Cookie Marmalade**

**| Start time: 11:20**

**| Exit time: 12:50**

**| Payment: 1500 rubles**

**----------------------------------------**

**Time: 11:20**

**Manager: Manager 1**

**----------------------------------------**

**| Guests arrived: 3**

**| Hall: 1**

**| Table: Table 3**

**| Orders: Coffee Tea Cookie Marmalade**

**| Start time: 11:20**

**| Exit time: 12:20**

**| Payment: 600 rubles**

**----------------------------------------**

**Time: 11:50**

**Manager: Manager 3**

**----------------------------------------**

**| Guests arrived: 2**

**| Hall: 2**

**| Table: Table 5**

**| Orders: Coffee Coffee Coffee Tea Cookie Marmalade**

**| Start time: 11:50**

**| Exit time: 13:20**

**| Payment: 600 rubles**

**----------------------------------------**

**Time: 11:50**

**Manager: Manager 2**

**----------------------------------------**

**| Guests arrived: 8**

**| Hall: 3**

**| Table: Table 7**

**| Orders: Coffee Coffee Coffee Tea Tea Tea Cookie Cookie Marmalade Marmalade**

**| Start time: 11:50**

**| Exit time: 14:20**

**| Payment: 4000 rubles**

**----------------------------------------**

**Time: 11:50**

**Manager: Manager 2**

**----------------------------------------**

**| Guests arrived: 8**

**| Hall: 3**

**| Table: Table 7**

**| Orders: Coffee Coffee Coffee Tea Tea Tea Cookie Marmalade**

**| Start time: 11:50**

**| Exit time: 13:50**

**| Payment: 3200 rubles**

**----------------------------------------**

**Time: 12:45**

**Manager: Manager 2**

**----------------------------------------**

**| Guests arrived: 1**

**| Hall: 3**

**| Table: Table 8**

**| Orders: Coffee Tea Cookie Marmalade Marmalade**

**| Start time: 12:45**

**| Exit time: 14:0**

**| Payment: 250 rubles**

**----------------------------------------**

**Time: 12:45**

**Manager: Manager 1**

**----------------------------------------**

**| Guests arrived: 5**

**| Hall: 1**

**| Table: Table 1**

**| Orders: Coffee Tea Tea Tea Cookie Cookie Marmalade**

**| Start time: 12:45**

**| Exit time: 14:30**

**| Payment: 1750 rubles**

**----------------------------------------**

**Time: 13:15**

**Manager: Manager 2**

**----------------------------------------**

**| Guests arrived: 5**

**| Hall: 2**

**| Table: Table 4**

**| Orders: Coffee Tea Tea Tea Cookie Cookie Marmalade**

**| Start time: 13:15**

**| Exit time: 15:0**

**| Payment: 1750 rubles**

**----------------------------------------**

**Time: 13:15**

**Manager: Manager 1**

**----------------------------------------**

**| Guests arrived: 4**

**| Hall: 2**

**| Table: Table 6**

**| Orders: Coffee Coffee Coffee Tea Tea Tea Cookie Cookie Marmalade Marmalade**

**| Start time: 13:15**

**| Exit time: 15:45**

**| Payment: 2000 rubles**

**----------------------------------------**

**Time: 13:15**

**Manager: Manager 3**

**----------------------------------------**

**| Guests arrived: 3**

**| Hall: 3**

**| Table: Table 7**

**| Orders: Coffee Coffee Coffee Tea Tea Cookie Cookie Marmalade Marmalade**

**| Start time: 13:15**

**| Exit time: 15:30**

**| Payment: 1350 rubles**

**----------------------------------------**

**Time: 13:50**

**Manager: Manager 1**

**----------------------------------------**

**| Guests arrived: 4**

**| Hall: 1**

**| Table: Table 3**

**| Orders: Coffee Coffee Coffee Tea Cookie Marmalade Marmalade**

**| Start time: 13:50**

**| Exit time: 15:35**

**| Payment: 1400 rubles**

**----------------------------------------**

**Time: 13:50**

**Manager: Manager 3**

**----------------------------------------**

**| Guests arrived: 8**

**| Hall: 1**

**| Table: Table 3**

**| Orders: Coffee Coffee Coffee Tea Tea Tea Cookie Cookie Marmalade**

**| Start time: 13:50**

**| Exit time: 16:5**

**| Payment: 3600 rubles**

**----------------------------------------**

**Time: 13:50**

**Manager: Manager 1**

**----------------------------------------**

**| Guests arrived: 1**

**| Hall: 1**

**| Table: Table 1**

**| Orders: Coffee Coffee Coffee Tea Tea Tea Cookie Cookie Marmalade Marmalade**

**| Start time: 13:50**

**| Exit time: 16:20**

**| Payment: 500 rubles**

**----------------------------------------**

**Time: 13:50**

**Manager: Manager 3**

**----------------------------------------**

**| Guests arrived: 1**

**| Hall: 1**

**| Table: Table 3**

**| Orders: Coffee Coffee Coffee Tea Cookie Cookie Marmalade Marmalade**

**| Start time: 13:50**

**| Exit time: 15:50**

**| Payment: 400 rubles**

**----------------------------------------**

**Time: 13:50**

**Manager: Manager 1**

**----------------------------------------**

**| Guests arrived: 4**

**| Hall: 1**

**| Table: Table 3**

**| Orders: Coffee Coffee Tea Tea Tea Cookie Cookie Marmalade**

**| Start time: 13:50**

**| Exit time: 15:50**

**| Payment: 1600 rubles**

**----------------------------------------**

**Time: 14:50**

**Manager: Manager 1**

**----------------------------------------**

**| Guests arrived: 8**

**| Hall: 3**

**| Table: Table 8**

**| Orders: Coffee Coffee Tea Tea Cookie Cookie Marmalade Marmalade**

**| Start time: 14:50**

**| Exit time: 16:50**

**| Payment: 3200 rubles**

**----------------------------------------**

**Time: 14:50**

**Manager: Manager 2**

**----------------------------------------**

**| Guests arrived: 8**

**| Hall: 3**

**| Table: Table 8**

**| Orders: Coffee Coffee Coffee Tea Tea Tea Cookie Cookie Marmalade Marmalade**

**| Start time: 14:50**

**| Exit time: 17:20**

**| Payment: 4000 rubles**

**----------------------------------------**

**Time: 14:50**

**Manager: Manager 2**

**----------------------------------------**

**| Guests arrived: 1**

**| Hall: 2**

**| Table: Table 6**

**| Orders: Coffee Coffee Coffee Tea Tea Cookie Cookie Marmalade**

**| Start time: 14:50**

**| Exit time: 16:50**

**| Payment: 400 rubles**

**----------------------------------------**

**Time: 15:05**

**Manager: Manager 1**

**----------------------------------------**

**| Guests arrived: 2**

**| Hall: 1**

**| Table: Table 3**

**| Orders: Coffee Coffee Coffee Tea Tea Cookie Marmalade Marmalade**

**| Start time: 15:5**

**| Exit time: 17:5**

**| Payment: 800 rubles**

**----------------------------------------**

**Time: 15:25**

**Manager: Manager 3**

**----------------------------------------**

**| Guests arrived: 4**

**| Hall: 1**

**| Table: Table 3**

**| Orders: Coffee Coffee Coffee Tea Cookie Marmalade Marmalade**

**| Start time: 15:25**

**| Exit time: 17:10**

**| Payment: 1400 rubles**

**----------------------------------------**

**Time: 15:55**

**Manager: Manager 3**

**----------------------------------------**

**| Guests arrived: 5**

**| Hall: 3**

**| Table: Table 8**

**| Orders: Coffee Coffee Tea Tea Tea Cookie Marmalade**

**| Start time: 15:55**

**| Exit time: 17:40**

**| Payment: 1750 rubles**

**----------------------------------------**

**Time: 15:55**

**Manager: Manager 1**

**----------------------------------------**

**| Guests arrived: 5**

**| Hall: 2**

**| Table: Table 5**

**| Orders: Coffee Coffee Tea Tea Cookie Cookie Marmalade**

**| Start time: 15:55**

**| Exit time: 17:40**

**| Payment: 1750 rubles**

**----------------------------------------**

**Time: 15:55**

**Manager: Manager 1**

**----------------------------------------**

**| Guests arrived: 4**

**| Hall: 3**

**| Table: Table 8**

**| Orders: Coffee Coffee Coffee Tea Tea Cookie Cookie Marmalade Marmalade**

**| Start time: 15:55**

**| Exit time: 18:10**

**| Payment: 1800 rubles**

**----------------------------------------**

**Time: 15:55**

**Manager: Manager 2**

**----------------------------------------**

**| Guests arrived: 5**

**| Hall: 2**

**| Table: Table 5**

**| Orders: Coffee Tea Tea Cookie Marmalade Marmalade**

**| Start time: 15:55**

**| Exit time: 17:25**

**| Payment: 1500 rubles**

**----------------------------------------**

**Time: 16:20**

**Manager: Manager 1**

**----------------------------------------**

**| Guests arrived: 4**

**| Hall: 2**

**| Table: Table 4**

**| Orders: Coffee Coffee Tea Cookie Marmalade Marmalade**

**| Start time: 16:20**

**| Exit time: 17:50**

**| Payment: 1200 rubles**

**----------------------------------------**

**Time: 16:20**

**Manager: Manager 1**

**----------------------------------------**

**| Guests arrived: 4**

**| Hall: 2**

**| Table: Table 6**

**| Orders: Coffee Coffee Tea Tea Tea Cookie Cookie Marmalade Marmalade**

**| Start time: 16:20**

**| Exit time: 18:35**

**| Payment: 1800 rubles**

**----------------------------------------**

**Time: 16:20**

**Manager: Manager 3**

**----------------------------------------**

**| Guests arrived: 4**

**| Hall: 3**

**| Table: Table 7**

**| Orders: Coffee Coffee Coffee Tea Cookie Cookie Marmalade Marmalade**

**| Start time: 16:20**

**| Exit time: 18:20**

**| Payment: 1600 rubles**

**----------------------------------------**

**Time: 16:20**

**Manager: Manager 2**

**----------------------------------------**

**| Guests arrived: 7**

**| Hall: 1**

**| Table: Table 2**

**| Orders: Coffee Coffee Tea Tea Cookie Marmalade**

**| Start time: 16:20**

**| Exit time: 17:50**

**| Payment: 2100 rubles**

**----------------------------------------**

**Time: 16:45**

**Manager: Manager 3**

**----------------------------------------**

**| Guests arrived: 5**

**| Hall: 1**

**| Table: Table 2**

**| Orders: Coffee Coffee Coffee Tea Cookie Cookie Marmalade**

**| Start time: 16:45**

**| Exit time: 18:30**

**| Payment: 1750 rubles**

**----------------------------------------**

**Time: 16:45**

**Manager: Manager 3**

**----------------------------------------**

**| Guests arrived: 6**

**| Hall: 2**

**| Table: Table 4**

**| Orders: Coffee Coffee Tea Tea Tea Cookie Marmalade Marmalade**

**| Start time: 16:45**

**| Exit time: 18:45**

**| Payment: 2400 rubles**

**----------------------------------------**

**Time: 16:45**

**Manager: Manager 1**

**----------------------------------------**

**| Guests arrived: 4**

**| Hall: 3**

**| Table: Table 9**

**| Orders: Coffee Coffee Coffee Tea Tea Cookie Cookie Marmalade Marmalade**

**| Start time: 16:45**

**| Exit time: 19:0**

**| Payment: 1800 rubles**

**----------------------------------------**

**Time: 16:45**

**Manager: Manager 2**

**----------------------------------------**

**| Guests arrived: 2**

**| Hall: 2**

**| Table: Table 5**

**| Orders: Coffee Coffee Coffee Tea Cookie Marmalade Marmalade**

**| Start time: 16:45**

**| Exit time: 18:30**

**| Payment: 700 rubles**

**----------------------------------------**

**Time: 16:45**

**Manager: Manager 3**

**----------------------------------------**

**| Guests arrived: 2**

**| Hall: 1**

**| Table: Table 1**

**| Orders: Coffee Tea Tea Tea Cookie Marmalade Marmalade**

**| Start time: 16:45**

**| Exit time: 18:30**

**| Payment: 700 rubles**

**----------------------------------------**

**Time: 17:10**

**Manager: Manager 1**

**----------------------------------------**

**| Guests arrived: 7**

**| Hall: 1**

**| Table: Table 3**

**| Orders: Coffee Coffee Coffee Tea Cookie Marmalade Marmalade**

**| Start time: 17:10**

**| Exit time: 18:55**

**| Payment: 2450 rubles**

**----------------------------------------**

**Time: 17:10**

**Manager: Manager 1**

**----------------------------------------**

**| Guests arrived: 3**

**| Hall: 2**

**| Table: Table 6**

**| Orders: Coffee Coffee Coffee Tea Tea Cookie Cookie Marmalade Marmalade**

**| Start time: 17:10**

**| Exit time: 19:25**

**| Payment: 1350 rubles**

**----------------------------------------**

**Time: 17:50**

**Manager: Manager 2**

**----------------------------------------**

**| Guests arrived: 3**

**| Hall: 1**

**| Table: Table 3**

**| Orders: Coffee Coffee Coffee Tea Tea Cookie Cookie Marmalade Marmalade**

**| Start time: 17:50**

**| Exit time: 20:5**

**| Payment: 1350 rubles**

**----------------------------------------**

**Time: 17:50**

**Manager: Manager 1**

**----------------------------------------**

**| Guests arrived: 4**

**| Hall: 1**

**| Table: Table 1**

**| Orders: Coffee Tea Tea Cookie Cookie Marmalade**

**| Start time: 17:50**

**| Exit time: 19:20**

**| Payment: 1200 rubles**

**----------------------------------------**

**Time: 17:50**

**Manager: Manager 3**

**----------------------------------------**

**| Guests arrived: 5**

**| Hall: 2**

**| Table: Table 5**

**| Orders: Coffee Tea Tea Cookie Marmalade Marmalade**

**| Start time: 17:50**

**| Exit time: 19:20**

**| Payment: 1500 rubles**

**----------------------------------------**

**Time: 17:50**

**Manager: Manager 2**

**----------------------------------------**

**| Guests arrived: 4**

**| Hall: 2**

**| Table: Table 4**

**| Orders: Coffee Coffee Coffee Tea Tea Tea Cookie Marmalade Marmalade**

**| Start time: 17:50**

**| Exit time: 20:5**

**| Payment: 1800 rubles**

**----------------------------------------**

**Time: 17:50**

**Manager: Manager 1**

**----------------------------------------**

**| Guests arrived: 4**

**| Hall: 2**

**| Table: Table 4**

**| Orders: Coffee Coffee Tea Tea Tea Cookie Marmalade**

**| Start time: 17:50**

**| Exit time: 19:35**

**| Payment: 1400 rubles**

**----------------------------------------**

**Time: 18:20**

**Manager: Manager 1**

**----------------------------------------**

**| Guests arrived: 3**

**| Hall: 2**

**| Table: Table 6**

**| Orders: Coffee Coffee Coffee Tea Tea Cookie Marmalade Marmalade**

**| Start time: 18:20**

**| Exit time: 20:20**

**| Payment: 1200 rubles**

**----------------------------------------**

**Time: 18:20**

**Manager: Manager 3**

**----------------------------------------**

**| Guests arrived: 7**

**| Hall: 1**

**| Table: Table 2**

**| Orders: Coffee Tea Tea Tea Cookie Cookie Marmalade Marmalade**

**| Start time: 18:20**

**| Exit time: 20:20**

**| Payment: 2800 rubles**

**----------------------------------------**

**Time: 18:20**

**Manager: Manager 2**

**----------------------------------------**

**| Guests arrived: 8**

**| Hall: 2**

**| Table: Table 6**

**| Orders: Coffee Coffee Coffee Tea Cookie Marmalade**

**| Start time: 18:20**

**| Exit time: 19:50**

**| Payment: 2400 rubles**

**----------------------------------------**

**Time: 19:10**

**Manager: Manager 1**

**----------------------------------------**

**| Guests arrived: 4**

**| Hall: 3**

**| Table: Table 8**

**| Orders: Coffee Coffee Coffee Tea Cookie Marmalade**

**| Start time: 19:10**

**| Exit time: 20:40**

**| Payment: 1200 rubles**

**----------------------------------------**

**Time: 19:10**

**Manager: Manager 1**

**----------------------------------------**

**| Guests arrived: 6**

**| Hall: 3**

**| Table: Table 7**

**| Orders: Coffee Coffee Coffee Tea Tea Tea Cookie Marmalade**

**| Start time: 19:10**

**| Exit time: 21:10**

**| Payment: 2400 rubles**

**----------------------------------------**

**Time: 19:40**

**Manager: Manager 3**

**----------------------------------------**

**| Guests arrived: 8**

**| Hall: 3**

**| Table: Table 8**

**| Orders: Coffee Tea Tea Cookie Marmalade Marmalade**

**| Start time: 19:40**

**| Exit time: 21:10**

**| Payment: 2400 rubles**

**----------------------------------------**

**Time: 19:40**

**Manager: Manager 2**

**----------------------------------------**

**| Guests arrived: 1**

**| Hall: 2**

**| Table: Table 5**

**| Orders: Coffee Coffee Coffee Tea Tea Tea Cookie Marmalade**

**| Start time: 19:40**

**| Exit time: 21:40**

**| Payment: 400 rubles**

**----------------------------------------**

**Time: 20:30**

**Manager: Manager 1**

**----------------------------------------**

**| Guests arrived: 2**

**| Hall: 2**

**| Table: Table 4**

**| Orders: Coffee Tea Tea Cookie Cookie Marmalade**

**| Start time: 20:30**

**| Exit time: 22:0**

**| Payment: 600 rubles**

**----------------------------------------**

**Time: 21:20**

**Manager: Manager 1**

**----------------------------------------**

**| Guests arrived: 2**

**| Hall: 2**

**| Table: Table 6**

**| Orders: Coffee Coffee Tea Tea Cookie Marmalade Marmalade**

**| Start time: 21:20**

**| Exit time: 23:5**

**| Payment: 700 rubles**

**----------------------------------------**

**Time: 21:20**

**Manager: Manager 3**

**----------------------------------------**

**| Guests arrived: 8**

**| Hall: 2**

**| Table: Table 6**

**| Orders: Coffee Coffee Coffee Tea Tea Tea Cookie Cookie Marmalade Marmalade**

**| Start time: 21:20**

**| Exit time: 23:50**

**| Payment: 4000 rubles**

**----------------------------------------**

**Time: 21:20**

**Manager: Manager 2**

**----------------------------------------**

**| Guests arrived: 5**

**| Hall: 1**

**| Table: Table 1**

**| Orders: Coffee Coffee Tea Tea Cookie Cookie Marmalade**

**| Start time: 21:20**

**| Exit time: 23:5**

**| Payment: 1750 rubles**

**----------------------------------------**

**Time: 21:35**

**Manager: Manager 2**

**----------------------------------------**

**| Guests arrived: 8**

**| Hall: 3**

**| Table: Table 8**

**| Orders: Coffee Coffee Coffee Tea Tea Tea Cookie Marmalade**

**| Start time: 21:35**

**| Exit time: 23:35**

**| Payment: 3200 rubles**

**----------------------------------------**

**Time: 21:35**

**Manager: Manager 1**

**----------------------------------------**

**| Guests arrived: 5**

**| Hall: 3**

**| Table: Table 9**

**| Orders: Coffee Coffee Tea Tea Tea Cookie Marmalade Marmalade**

**| Start time: 21:35**

**| Exit time: 23:35**

**| Payment: 2000 rubles**

**----------------------------------------**

**Time: 21:35**

**Manager: Manager 2**

**----------------------------------------**

**| Guests arrived: 7**

**| Hall: 1**

**| Table: Table 2**

**| Orders: Coffee Tea Cookie Marmalade**

**| Start time: 21:35**

**| Exit time: 22:35**

**| Payment: 1400 rubles**

**----------------------------------------**

**Time: 21:35**

**Manager: Manager 3**

**----------------------------------------**

**| Guests arrived: 6**

**| Hall: 3**

**| Table: Table 7**

**| Orders: Coffee Tea Tea Tea Cookie Marmalade**

**| Start time: 21:35**

**| Exit time: 23:5**

**| Payment: 1800 rubles**

**----------------------------------------**

**Time: 22:00**

**Manager: Manager 2**

**----------------------------------------**

**| Guests arrived: 8**

**| Hall: 1**

**| Table: Table 3**

**| Orders: Coffee Coffee Coffee Tea Tea Cookie Marmalade Marmalade**

**| Start time: 22:0**

**| Exit time: 0:0**

**| Payment: 3200 rubles**

**----------------------------------------**

**Time: 22:00**

**Manager: Manager 2**

**----------------------------------------**

**| Guests arrived: 4**

**| Hall: 3**

**| Table: Table 9**

**| Orders: Coffee Coffee Coffee Tea Cookie Cookie Marmalade**

**| Start time: 22:0**

**| Exit time: 23:45**

**| Payment: 1400 rubles**

**----------------------------------------**

**Time: 22:35**

**Manager: Manager 2**

**----------------------------------------**

**| Guests arrived: 7**

**| Hall: 2**

**| Table: Table 5**

**| Orders: Coffee Coffee Coffee Tea Tea Tea Cookie Marmalade Marmalade**

**| Start time: 22:35**

**| Exit time: 0:50**

**| Payment: 3150 rubles**

**----------------------------------------**

**Time: 22:35**

**Manager: Manager 1**

**----------------------------------------**

**| Guests arrived: 1**

**| Hall: 1**

**| Table: Table 1**

**| Orders: Coffee Coffee Coffee Tea Cookie Marmalade**

**| Start time: 22:35**

**| Exit time: 0:5**

**| Payment: 300 rubles**

**----------------------------------------**

**Time: 22:35**

**Manager: Manager 1**

**----------------------------------------**

**| Guests arrived: 4**

**| Hall: 3**

**| Table: Table 9**

**| Orders: Coffee Coffee Coffee Tea Tea Cookie Marmalade Marmalade**

**| Start time: 22:35**

**| Exit time: 0:35**

**| Payment: 1600 rubles**

**----------------------------------------**

**Time: 22:35**

**Manager: Manager 3**

**----------------------------------------**

**| Guests arrived: 8**

**| Hall: 3**

**| Table: Table 7**

**| Orders: Coffee Tea Cookie Marmalade Marmalade**

**| Start time: 22:35**

**| Exit time: 23:50**

**| Payment: 2000 rubles**

**----------------------------------------**

**Time: 22:35**

**Manager: Manager 3**

**----------------------------------------**

**| Guests arrived: 1**

**| Hall: 2**

**| Table: Table 4**

**| Orders: Coffee Coffee Tea Cookie Marmalade Marmalade**

**| Start time: 22:35**

**| Exit time: 0:5**

**| Payment: 300 rubles**

**----------------------------------------**

**Time: 22:40**

**Manager: Manager 2**

**----------------------------------------**

**| Guests arrived: 2**

**| Hall: 2**

**| Table: Table 5**

**| Orders: Coffee Coffee Coffee Tea Tea Cookie Cookie Marmalade Marmalade**

**| Start time: 22:40**

**| Exit time: 0:55**

**| Payment: 900 rubles**

**----------------------------------------**

**Time: 22:40**

**Manager: Manager 1**

**----------------------------------------**

**| Guests arrived: 7**

**| Hall: 2**

**| Table: Table 6**

**| Orders: Coffee Tea Tea Tea Cookie Marmalade Marmalade**

**| Start time: 22:40**

**| Exit time: 0:25**

**| Payment: 2450 rubles**

**----------------------------------------**

**Time: 22:50**

**Manager: Manager 1**

**----------------------------------------**

**| Guests arrived: 5**

**| Hall: 2**

**| Table: Table 5**

**| Orders: Coffee Coffee Tea Cookie Cookie Marmalade**

**| Start time: 22:50**

**| Exit time: 0:20**

**| Payment: 1500 rubles**

**----------------------------------------**

**Time: 22:50**

**Manager: Manager 3**

**----------------------------------------**

**| Guests arrived: 1**

**| Hall: 2**

**| Table: Table 4**

**| Orders: Coffee Coffee Tea Cookie Cookie Marmalade**

**| Start time: 22:50**

**| Exit time: 0:20**

**| Payment: 300 rubles**

**----------------------------------------**

**Time: 22:50**

**Manager: Manager 1**

**----------------------------------------**

**| Guests arrived: 8**

**| Hall: 2**

**| Table: Table 5**

**| Orders: Coffee Tea Cookie Cookie Marmalade Marmalade**

**| Start time: 22:50**

**| Exit time: 0:20**

**| Payment: 2400 rubles**

**----------------------------------------**

**Time: 22:50**

**Manager: Manager 1**

**----------------------------------------**

**| Guests arrived: 2**

**| Hall: 2**

**| Table: Table 5**

**| Orders: Coffee Tea Tea Tea Cookie Cookie Marmalade Marmalade**

**| Start time: 22:50**

**| Exit time: 0:50**

**| Payment: 800 rubles**

**----------------------------------------**

**Time: 22:50**

**Manager: Manager 1**

**----------------------------------------**

**| Guests arrived: 1**

**| Hall: 1**

**| Table: Table 3**

**| Orders: Coffee Coffee Coffee Tea Tea Cookie Cookie Marmalade**

**| Start time: 22:50**

**| Exit time: 0:50**

**| Payment: 400 rubles**

**----------------------------------------**

**+-------------------------------------------------------------------------+**

**| Dop. zadaniya |**

**+-------------------------------------------------------------------------+**

**| 1) The most frequent manager: Manager 1 generated 35 times.**

**| 2) The most frequent table number: Table 5 was generated 14 times.**

**| 3) Total revenue: 140000 rubles.**

**| 4) Number of groups generated: 94.**

**+-------------------------------------------------------------------------+**

**Тестовый пример 2:**

**Time: 9:00**

**Manager: Manager 3**

**----------------------------------------**

**| Guests arrived: 6**

**| Hall: 1**

**| Table: Table 2**

**| Orders: Coffee Coffee Coffee Tea Tea Cookie Marmalade Marmalade**

**| Start time: 9:0**

**| Exit time: 11:0**

**| Payment: 2400 rubles**

**----------------------------------------**

**Time: 9:00**

**Manager: Manager 1**

**----------------------------------------**

**| Guests arrived: 4**

**| Hall: 3**

**| Table: Table 7**

**| Orders: Coffee Coffee Coffee Tea Tea Tea Cookie Cookie Marmalade Marmalade**

**| Start time: 9:0**

**| Exit time: 11:30**

**| Payment: 2000 rubles**

**----------------------------------------**

**Time: 9:05**

**Manager: Manager 2**

**----------------------------------------**

**| Guests arrived: 2**

**| Hall: 3**

**| Table: Table 9**

**| Orders: Coffee Coffee Tea Tea Tea Cookie Marmalade**

**| Start time: 9:5**

**| Exit time: 10:50**

**| Payment: 700 rubles**

**----------------------------------------**

**Time: 9:10**

**Manager: Manager 1**

**----------------------------------------**

**| Guests arrived: 5**

**| Hall: 1**

**| Table: Table 3**

**| Orders: Coffee Tea Tea Cookie Marmalade**

**| Start time: 9:10**

**| Exit time: 10:25**

**| Payment: 1250 rubles**

**----------------------------------------**

**Time: 9:55**

**Manager: Manager 1**

**----------------------------------------**

**| Guests arrived: 2**

**| Hall: 2**

**| Table: Table 4**

**| Orders: Coffee Coffee Tea Cookie Marmalade Marmalade**

**| Start time: 9:55**

**| Exit time: 11:25**

**| Payment: 600 rubles**

**----------------------------------------**

**Time: 10:05**

**Manager: Manager 1**

**----------------------------------------**

**| Guests arrived: 3**

**| Hall: 3**

**| Table: Table 7**

**| Orders: Coffee Coffee Tea Cookie Marmalade**

**| Start time: 10:5**

**| Exit time: 11:20**

**| Payment: 750 rubles**

**----------------------------------------**

**Time: 10:05**

**Manager: Manager 3**

**----------------------------------------**

**| Guests arrived: 8**

**| Hall: 1**

**| Table: Table 2**

**| Orders: Coffee Coffee Coffee Tea Tea Cookie Marmalade Marmalade**

**| Start time: 10:5**

**| Exit time: 12:5**

**| Payment: 3200 rubles**

**----------------------------------------**

**Time: 10:05**

**Manager: Manager 2**

**----------------------------------------**

**| Guests arrived: 1**

**| Hall: 2**

**| Table: Table 6**

**| Orders: Coffee Coffee Tea Tea Tea Cookie Cookie Marmalade Marmalade**

**| Start time: 10:5**

**| Exit time: 12:20**

**| Payment: 450 rubles**

**----------------------------------------**

**Time: 11:05**

**Manager: Manager 3**

**----------------------------------------**

**| Guests arrived: 6**

**| Hall: 2**

**| Table: Table 5**

**| Orders: Coffee Tea Tea Tea Cookie Cookie Marmalade Marmalade**

**| Start time: 11:5**

**| Exit time: 13:5**

**| Payment: 2400 rubles**

**----------------------------------------**

**Time: 11:05**

**Manager: Manager 1**

**----------------------------------------**

**| Guests arrived: 4**

**| Hall: 1**

**| Table: Table 3**

**| Orders: Coffee Coffee Coffee Tea Tea Tea Cookie Marmalade**

**| Start time: 11:5**

**| Exit time: 13:5**

**| Payment: 1600 rubles**

**----------------------------------------**

**Time: 11:05**

**Manager: Manager 3**

**----------------------------------------**

**| Guests arrived: 7**

**| Hall: 3**

**| Table: Table 9**

**| Orders: Coffee Coffee Coffee Tea Tea Tea Cookie Cookie Marmalade Marmalade**

**| Start time: 11:5**

**| Exit time: 13:35**

**| Payment: 3500 rubles**

**----------------------------------------**

**Time: 11:05**

**Manager: Manager 2**

**----------------------------------------**

**| Guests arrived: 2**

**| Hall: 2**

**| Table: Table 6**

**| Orders: Coffee Coffee Coffee Tea Tea Tea Cookie Marmalade**

**| Start time: 11:5**

**| Exit time: 13:5**

**| Payment: 800 rubles**

**----------------------------------------**

**Time: 11:10**

**Manager: Manager 3**

**----------------------------------------**

**| Guests arrived: 7**

**| Hall: 1**

**| Table: Table 2**

**| Orders: Coffee Coffee Coffee Tea Cookie Marmalade**

**| Start time: 11:10**

**| Exit time: 12:40**

**| Payment: 2100 rubles**

**----------------------------------------**

**Time: 11:15**

**Manager: Manager 1**

**----------------------------------------**

**| Guests arrived: 7**

**| Hall: 2**

**| Table: Table 4**

**| Orders: Coffee Tea Cookie Cookie Marmalade**

**| Start time: 11:15**

**| Exit time: 12:30**

**| Payment: 1750 rubles**

**----------------------------------------**

**Time: 11:15**

**Manager: Manager 2**

**----------------------------------------**

**| Guests arrived: 4**

**| Hall: 2**

**| Table: Table 4**

**| Orders: Coffee Tea Tea Tea Cookie Marmalade Marmalade**

**| Start time: 11:15**

**| Exit time: 13:0**

**| Payment: 1400 rubles**

**----------------------------------------**

**Time: 11:15**

**Manager: Manager 1**

**----------------------------------------**

**| Guests arrived: 2**

**| Hall: 2**

**| Table: Table 6**

**| Orders: Coffee Coffee Tea Tea Tea Cookie Cookie Marmalade Marmalade**

**| Start time: 11:15**

**| Exit time: 13:30**

**| Payment: 900 rubles**

**----------------------------------------**

**Time: 11:15**

**Manager: Manager 3**

**----------------------------------------**

**| Guests arrived: 4**

**| Hall: 3**

**| Table: Table 7**

**| Orders: Coffee Coffee Tea Cookie Marmalade**

**| Start time: 11:15**

**| Exit time: 12:30**

**| Payment: 1000 rubles**

**----------------------------------------**

**Time: 11:15**

**Manager: Manager 3**

**----------------------------------------**

**| Guests arrived: 7**

**| Hall: 1**

**| Table: Table 3**

**| Orders: Coffee Tea Tea Cookie Marmalade**

**| Start time: 11:15**

**| Exit time: 12:30**

**| Payment: 1750 rubles**

**----------------------------------------**

**Time: 11:40**

**Manager: Manager 2**

**----------------------------------------**

**| Guests arrived: 4**

**| Hall: 1**

**| Table: Table 1**

**| Orders: Coffee Coffee Tea Tea Cookie Cookie Marmalade**

**| Start time: 11:40**

**| Exit time: 13:25**

**| Payment: 1400 rubles**

**----------------------------------------**

**Time: 11:40**

**Manager: Manager 2**

**----------------------------------------**

**| Guests arrived: 1**

**| Hall: 3**

**| Table: Table 7**

**| Orders: Coffee Coffee Coffee Tea Tea Tea Cookie Cookie Marmalade Marmalade**

**| Start time: 11:40**

**| Exit time: 14:10**

**| Payment: 500 rubles**

**----------------------------------------**

**Time: 11:40**

**Manager: Manager 1**

**----------------------------------------**

**| Guests arrived: 6**

**| Hall: 1**

**| Table: Table 1**

**| Orders: Coffee Coffee Coffee Tea Cookie Cookie Marmalade**

**| Start time: 11:40**

**| Exit time: 13:25**

**| Payment: 2100 rubles**

**----------------------------------------**

**Time: 11:40**

**Manager: Manager 3**

**----------------------------------------**

**| Guests arrived: 8**

**| Hall: 3**

**| Table: Table 7**

**| Orders: Coffee Coffee Coffee Tea Tea Tea Cookie Marmalade Marmalade**

**| Start time: 11:40**

**| Exit time: 13:55**

**| Payment: 3600 rubles**

**----------------------------------------**

**Time: 11:40**

**Manager: Manager 1**

**----------------------------------------**

**| Guests arrived: 1**

**| Hall: 3**

**| Table: Table 7**

**| Orders: Coffee Coffee Tea Cookie Marmalade Marmalade**

**| Start time: 11:40**

**| Exit time: 13:10**

**| Payment: 300 rubles**

**----------------------------------------**

**Time: 12:00**

**Manager: Manager 1**

**----------------------------------------**

**| Guests arrived: 1**

**| Hall: 2**

**| Table: Table 5**

**| Orders: Coffee Tea Cookie Cookie Marmalade Marmalade**

**| Start time: 12:0**

**| Exit time: 13:30**

**| Payment: 300 rubles**

**----------------------------------------**

**Time: 12:00**

**Manager: Manager 1**

**----------------------------------------**

**| Guests arrived: 7**

**| Hall: 2**

**| Table: Table 5**

**| Orders: Coffee Coffee Tea Tea Tea Cookie Cookie Marmalade**

**| Start time: 12:0**

**| Exit time: 14:0**

**| Payment: 2800 rubles**

**----------------------------------------**

**Time: 12:00**

**Manager: Manager 2**

**----------------------------------------**

**| Guests arrived: 8**

**| Hall: 1**

**| Table: Table 1**

**| Orders: Coffee Tea Tea Cookie Marmalade Marmalade**

**| Start time: 12:0**

**| Exit time: 13:30**

**| Payment: 2400 rubles**

**----------------------------------------**

**Time: 12:00**

**Manager: Manager 1**

**----------------------------------------**

**| Guests arrived: 2**

**| Hall: 1**

**| Table: Table 1**

**| Orders: Coffee Tea Cookie Cookie Marmalade**

**| Start time: 12:0**

**| Exit time: 13:15**

**| Payment: 500 rubles**

**----------------------------------------**

**Time: 12:00**

**Manager: Manager 1**

**----------------------------------------**

**| Guests arrived: 3**

**| Hall: 2**

**| Table: Table 4**

**| Orders: Coffee Tea Tea Tea Cookie Cookie Marmalade**

**| Start time: 12:0**

**| Exit time: 13:45**

**| Payment: 1050 rubles**

**----------------------------------------**

**Time: 12:20**

**Manager: Manager 2**

**----------------------------------------**

**| Guests arrived: 1**

**| Hall: 1**

**| Table: Table 3**

**| Orders: Coffee Coffee Tea Tea Cookie Cookie Marmalade**

**| Start time: 12:20**

**| Exit time: 14:5**

**| Payment: 350 rubles**

**----------------------------------------**

**Time: 12:20**

**Manager: Manager 2**

**----------------------------------------**

**| Guests arrived: 4**

**| Hall: 2**

**| Table: Table 6**

**| Orders: Coffee Coffee Coffee Tea Cookie Marmalade Marmalade**

**| Start time: 12:20**

**| Exit time: 14:5**

**| Payment: 1400 rubles**

**----------------------------------------**

**Time: 12:20**

**Manager: Manager 3**

**----------------------------------------**

**| Guests arrived: 2**

**| Hall: 3**

**| Table: Table 7**

**| Orders: Coffee Coffee Tea Cookie Marmalade Marmalade**

**| Start time: 12:20**

**| Exit time: 13:50**

**| Payment: 600 rubles**

**----------------------------------------**

**Time: 12:40**

**Manager: Manager 2**

**----------------------------------------**

**| Guests arrived: 7**

**| Hall: 2**

**| Table: Table 4**

**| Orders: Coffee Coffee Coffee Tea Tea Cookie Cookie Marmalade**

**| Start time: 12:40**

**| Exit time: 14:40**

**| Payment: 2800 rubles**

**----------------------------------------**

**Time: 12:40**

**Manager: Manager 1**

**----------------------------------------**

**| Guests arrived: 7**

**| Hall: 2**

**| Table: Table 5**

**| Orders: Coffee Coffee Coffee Tea Tea Tea Cookie Marmalade**

**| Start time: 12:40**

**| Exit time: 14:40**

**| Payment: 2800 rubles**

**----------------------------------------**

**Time: 12:40**

**Manager: Manager 1**

**----------------------------------------**

**| Guests arrived: 7**

**| Hall: 2**

**| Table: Table 5**

**| Orders: Coffee Tea Cookie Cookie Marmalade Marmalade**

**| Start time: 12:40**

**| Exit time: 14:10**

**| Payment: 2100 rubles**

**----------------------------------------**

**Time: 12:40**

**Manager: Manager 2**

**----------------------------------------**

**| Guests arrived: 3**

**| Hall: 3**

**| Table: Table 8**

**| Orders: Coffee Tea Tea Tea Cookie Cookie Marmalade Marmalade**

**| Start time: 12:40**

**| Exit time: 14:40**

**| Payment: 1200 rubles**

**----------------------------------------**

**Time: 12:50**

**Manager: Manager 1**

**----------------------------------------**

**| Guests arrived: 6**

**| Hall: 3**

**| Table: Table 8**

**| Orders: Coffee Tea Tea Cookie Marmalade**

**| Start time: 12:50**

**| Exit time: 14:5**

**| Payment: 1500 rubles**

**----------------------------------------**

**Time: 12:50**

**Manager: Manager 1**

**----------------------------------------**

**| Guests arrived: 7**

**| Hall: 2**

**| Table: Table 6**

**| Orders: Coffee Coffee Tea Tea Cookie Cookie Marmalade Marmalade**

**| Start time: 12:50**

**| Exit time: 14:50**

**| Payment: 2800 rubles**

**----------------------------------------**

**Time: 13:30**

**Manager: Manager 2**

**----------------------------------------**

**| Guests arrived: 7**

**| Hall: 2**

**| Table: Table 6**

**| Orders: Coffee Tea Tea Tea Cookie Cookie Marmalade Marmalade**

**| Start time: 13:30**

**| Exit time: 15:30**

**| Payment: 2800 rubles**

**----------------------------------------**

**Time: 13:30**

**Manager: Manager 3**

**----------------------------------------**

**| Guests arrived: 5**

**| Hall: 2**

**| Table: Table 6**

**| Orders: Coffee Coffee Coffee Tea Cookie Marmalade Marmalade**

**| Start time: 13:30**

**| Exit time: 15:15**

**| Payment: 1750 rubles**

**----------------------------------------**

**Time: 13:30**

**Manager: Manager 2**

**----------------------------------------**

**| Guests arrived: 2**

**| Hall: 2**

**| Table: Table 4**

**| Orders: Coffee Coffee Coffee Tea Tea Tea Cookie Cookie Marmalade Marmalade**

**| Start time: 13:30**

**| Exit time: 16:0**

**| Payment: 1000 rubles**

**----------------------------------------**

**Time: 13:50**

**Manager: Manager 1**

**----------------------------------------**

**| Guests arrived: 6**

**| Hall: 1**

**| Table: Table 2**

**| Orders: Coffee Coffee Coffee Tea Tea Tea Cookie Marmalade Marmalade**

**| Start time: 13:50**

**| Exit time: 16:5**

**| Payment: 2700 rubles**

**----------------------------------------**

**Time: 13:50**

**Manager: Manager 2**

**----------------------------------------**

**| Guests arrived: 6**

**| Hall: 2**

**| Table: Table 6**

**| Orders: Coffee Tea Cookie Marmalade Marmalade**

**| Start time: 13:50**

**| Exit time: 15:5**

**| Payment: 1500 rubles**

**----------------------------------------**

**Time: 13:50**

**Manager: Manager 1**

**----------------------------------------**

**| Guests arrived: 5**

**| Hall: 2**

**| Table: Table 5**

**| Orders: Coffee Tea Cookie Cookie Marmalade**

**| Start time: 13:50**

**| Exit time: 15:5**

**| Payment: 1250 rubles**

**----------------------------------------**

**Time: 14:35**

**Manager: Manager 1**

**----------------------------------------**

**| Guests arrived: 8**

**| Hall: 1**

**| Table: Table 1**

**| Orders: Coffee Coffee Coffee Tea Tea Tea Cookie Cookie Marmalade**

**| Start time: 14:35**

**| Exit time: 16:50**

**| Payment: 3600 rubles**

**----------------------------------------**

**Time: 14:35**

**Manager: Manager 3**

**----------------------------------------**

**| Guests arrived: 3**

**| Hall: 1**

**| Table: Table 2**

**| Orders: Coffee Coffee Coffee Tea Cookie Cookie Marmalade**

**| Start time: 14:35**

**| Exit time: 16:20**

**| Payment: 1050 rubles**

**----------------------------------------**

**Time: 14:35**

**Manager: Manager 3**

**----------------------------------------**

**| Guests arrived: 3**

**| Hall: 2**

**| Table: Table 4**

**| Orders: Coffee Tea Cookie Marmalade Marmalade**

**| Start time: 14:35**

**| Exit time: 15:50**

**| Payment: 750 rubles**

**----------------------------------------**

**Time: 14:35**

**Manager: Manager 3**

**----------------------------------------**

**| Guests arrived: 8**

**| Hall: 3**

**| Table: Table 7**

**| Orders: Coffee Tea Cookie Cookie Marmalade Marmalade**

**| Start time: 14:35**

**| Exit time: 16:5**

**| Payment: 2400 rubles**

**----------------------------------------**

**Time: 14:35**

**Manager: Manager 1**

**----------------------------------------**

**| Guests arrived: 4**

**| Hall: 1**

**| Table: Table 2**

**| Orders: Coffee Tea Cookie Cookie Marmalade Marmalade**

**| Start time: 14:35**

**| Exit time: 16:5**

**| Payment: 1200 rubles**

**----------------------------------------**

**Time: 15:00**

**Manager: Manager 1**

**----------------------------------------**

**| Guests arrived: 5**

**| Hall: 3**

**| Table: Table 9**

**| Orders: Coffee Tea Tea Tea Cookie Cookie Marmalade Marmalade**

**| Start time: 15:0**

**| Exit time: 17:0**

**| Payment: 2000 rubles**

**----------------------------------------**

**Time: 15:00**

**Manager: Manager 1**

**----------------------------------------**

**| Guests arrived: 1**

**| Hall: 1**

**| Table: Table 2**

**| Orders: Coffee Coffee Coffee Tea Cookie Cookie Marmalade Marmalade**

**| Start time: 15:0**

**| Exit time: 17:0**

**| Payment: 400 rubles**

**----------------------------------------**

**Time: 15:00**

**Manager: Manager 3**

**----------------------------------------**

**| Guests arrived: 2**

**| Hall: 2**

**| Table: Table 6**

**| Orders: Coffee Coffee Tea Tea Cookie Cookie Marmalade Marmalade**

**| Start time: 15:0**

**| Exit time: 17:0**

**| Payment: 800 rubles**

**----------------------------------------**

**Time: 15:00**

**Manager: Manager 3**

**----------------------------------------**

**| Guests arrived: 1**

**| Hall: 3**

**| Table: Table 8**

**| Orders: Coffee Tea Tea Tea Cookie Cookie Marmalade Marmalade**

**| Start time: 15:0**

**| Exit time: 17:0**

**| Payment: 400 rubles**

**----------------------------------------**

**Time: 15:00**

**Manager: Manager 3**

**----------------------------------------**

**| Guests arrived: 6**

**| Hall: 2**

**| Table: Table 4**

**| Orders: Coffee Coffee Tea Tea Cookie Cookie Marmalade Marmalade**

**| Start time: 15:0**

**| Exit time: 17:0**

**| Payment: 2400 rubles**

**----------------------------------------**

**Time: 15:40**

**Manager: Manager 3**

**----------------------------------------**

**| Guests arrived: 1**

**| Hall: 3**

**| Table: Table 8**

**| Orders: Coffee Coffee Coffee Tea Tea Tea Cookie Marmalade**

**| Start time: 15:40**

**| Exit time: 17:40**

**| Payment: 400 rubles**

**----------------------------------------**

**Time: 15:40**

**Manager: Manager 1**

**----------------------------------------**

**| Guests arrived: 5**

**| Hall: 3**

**| Table: Table 9**

**| Orders: Coffee Tea Tea Tea Cookie Marmalade**

**| Start time: 15:40**

**| Exit time: 17:10**

**| Payment: 1500 rubles**

**----------------------------------------**

**Time: 15:40**

**Manager: Manager 3**

**----------------------------------------**

**| Guests arrived: 5**

**| Hall: 2**

**| Table: Table 5**

**| Orders: Coffee Coffee Coffee Tea Cookie Marmalade Marmalade**

**| Start time: 15:40**

**| Exit time: 17:25**

**| Payment: 1750 rubles**

**----------------------------------------**

**Time: 15:40**

**Manager: Manager 1**

**----------------------------------------**

**| Guests arrived: 7**

**| Hall: 1**

**| Table: Table 1**

**| Orders: Coffee Coffee Coffee Tea Tea Tea Cookie Cookie Marmalade Marmalade**

**| Start time: 15:40**

**| Exit time: 18:10**

**| Payment: 3500 rubles**

**----------------------------------------**

**Time: 16:05**

**Manager: Manager 1**

**----------------------------------------**

**| Guests arrived: 1**

**| Hall: 2**

**| Table: Table 5**

**| Orders: Coffee Coffee Tea Tea Cookie Marmalade**

**| Start time: 16:5**

**| Exit time: 17:35**

**| Payment: 300 rubles**

**----------------------------------------**

**Time: 16:05**

**Manager: Manager 2**

**----------------------------------------**

**| Guests arrived: 5**

**| Hall: 1**

**| Table: Table 3**

**| Orders: Coffee Tea Tea Cookie Cookie Marmalade**

**| Start time: 16:5**

**| Exit time: 17:35**

**| Payment: 1500 rubles**

**----------------------------------------**

**Time: 16:05**

**Manager: Manager 1**

**----------------------------------------**

**| Guests arrived: 5**

**| Hall: 1**

**| Table: Table 3**

**| Orders: Coffee Tea Cookie Cookie Marmalade Marmalade**

**| Start time: 16:5**

**| Exit time: 17:35**

**| Payment: 1500 rubles**

**----------------------------------------**

**Time: 16:30**

**Manager: Manager 1**

**----------------------------------------**

**| Guests arrived: 5**

**| Hall: 2**

**| Table: Table 4**

**| Orders: Coffee Coffee Coffee Tea Cookie Cookie Marmalade**

**| Start time: 16:30**

**| Exit time: 18:15**

**| Payment: 1750 rubles**

**----------------------------------------**

**Time: 16:30**

**Manager: Manager 2**

**----------------------------------------**

**| Guests arrived: 6**

**| Hall: 3**

**| Table: Table 7**

**| Orders: Coffee Tea Tea Cookie Marmalade**

**| Start time: 16:30**

**| Exit time: 17:45**

**| Payment: 1500 rubles**

**----------------------------------------**

**Time: 16:45**

**Manager: Manager 1**

**----------------------------------------**

**| Guests arrived: 8**

**| Hall: 3**

**| Table: Table 7**

**| Orders: Coffee Tea Cookie Marmalade**

**| Start time: 16:45**

**| Exit time: 17:45**

**| Payment: 1600 rubles**

**----------------------------------------**

**Time: 16:45**

**Manager: Manager 2**

**----------------------------------------**

**| Guests arrived: 2**

**| Hall: 2**

**| Table: Table 5**

**| Orders: Coffee Coffee Coffee Tea Cookie Cookie Marmalade Marmalade**

**| Start time: 16:45**

**| Exit time: 18:45**

**| Payment: 800 rubles**

**----------------------------------------**

**Time: 16:45**

**Manager: Manager 1**

**----------------------------------------**

**| Guests arrived: 2**

**| Hall: 3**

**| Table: Table 8**

**| Orders: Coffee Coffee Tea Tea Tea Cookie Marmalade Marmalade**

**| Start time: 16:45**

**| Exit time: 18:45**

**| Payment: 800 rubles**

**----------------------------------------**

**Time: 17:35**

**Manager: Manager 3**

**----------------------------------------**

**| Guests arrived: 2**

**| Hall: 2**

**| Table: Table 6**

**| Orders: Coffee Coffee Coffee Tea Cookie Cookie Marmalade Marmalade**

**| Start time: 17:35**

**| Exit time: 19:35**

**| Payment: 800 rubles**

**----------------------------------------**

**Time: 18:30**

**Manager: Manager 2**

**----------------------------------------**

**| Guests arrived: 4**

**| Hall: 3**

**| Table: Table 7**

**| Orders: Coffee Coffee Tea Cookie Cookie Marmalade**

**| Start time: 18:30**

**| Exit time: 20:0**

**| Payment: 1200 rubles**

**----------------------------------------**

**Time: 19:15**

**Manager: Manager 3**

**----------------------------------------**

**| Guests arrived: 1**

**| Hall: 1**

**| Table: Table 2**

**| Orders: Coffee Tea Tea Cookie Marmalade Marmalade**

**| Start time: 19:15**

**| Exit time: 20:45**

**| Payment: 300 rubles**

**----------------------------------------**

**Time: 19:15**

**Manager: Manager 2**

**----------------------------------------**

**| Guests arrived: 1**

**| Hall: 2**

**| Table: Table 6**

**| Orders: Coffee Coffee Coffee Tea Tea Tea Cookie Marmalade Marmalade**

**| Start time: 19:15**

**| Exit time: 21:30**

**| Payment: 450 rubles**

**----------------------------------------**

**Time: 19:15**

**Manager: Manager 2**

**----------------------------------------**

**| Guests arrived: 5**

**| Hall: 2**

**| Table: Table 4**

**| Orders: Coffee Coffee Coffee Tea Tea Cookie Cookie Marmalade Marmalade**

**| Start time: 19:15**

**| Exit time: 21:30**

**| Payment: 2250 rubles**

**----------------------------------------**

**Time: 19:15**

**Manager: Manager 3**

**----------------------------------------**

**| Guests arrived: 3**

**| Hall: 1**

**| Table: Table 3**

**| Orders: Coffee Coffee Tea Cookie Cookie Marmalade**

**| Start time: 19:15**

**| Exit time: 20:45**

**| Payment: 900 rubles**

**----------------------------------------**

**Time: 19:15**

**Manager: Manager 3**

**----------------------------------------**

**| Guests arrived: 7**

**| Hall: 1**

**| Table: Table 2**

**| Orders: Coffee Coffee Tea Tea Tea Cookie Marmalade**

**| Start time: 19:15**

**| Exit time: 21:0**

**| Payment: 2450 rubles**

**----------------------------------------**

**Time: 19:25**

**Manager: Manager 3**

**----------------------------------------**

**| Guests arrived: 6**

**| Hall: 1**

**| Table: Table 1**

**| Orders: Coffee Coffee Tea Tea Cookie Marmalade Marmalade**

**| Start time: 19:25**

**| Exit time: 21:10**

**| Payment: 2100 rubles**

**----------------------------------------**

**Time: 20:15**

**Manager: Manager 1**

**----------------------------------------**

**| Guests arrived: 8**

**| Hall: 1**

**| Table: Table 2**

**| Orders: Coffee Coffee Tea Cookie Marmalade**

**| Start time: 20:15**

**| Exit time: 21:30**

**| Payment: 2000 rubles**

**----------------------------------------**

**Time: 20:15**

**Manager: Manager 2**

**----------------------------------------**

**| Guests arrived: 2**

**| Hall: 3**

**| Table: Table 8**

**| Orders: Coffee Coffee Tea Tea Tea Cookie Marmalade**

**| Start time: 20:15**

**| Exit time: 22:0**

**| Payment: 700 rubles**

**----------------------------------------**

**Time: 20:15**

**Manager: Manager 1**

**----------------------------------------**

**| Guests arrived: 1**

**| Hall: 1**

**| Table: Table 1**

**| Orders: Coffee Coffee Coffee Tea Tea Cookie Marmalade**

**| Start time: 20:15**

**| Exit time: 22:0**

**| Payment: 350 rubles**

**----------------------------------------**

**Time: 20:15**

**Manager: Manager 3**

**----------------------------------------**

**| Guests arrived: 2**

**| Hall: 3**

**| Table: Table 9**

**| Orders: Coffee Coffee Coffee Tea Tea Tea Cookie Marmalade**

**| Start time: 20:15**

**| Exit time: 22:15**

**| Payment: 800 rubles**

**----------------------------------------**

**Time: 20:15**

**Manager: Manager 1**

**----------------------------------------**

**| Guests arrived: 3**

**| Hall: 2**

**| Table: Table 4**

**| Orders: Coffee Coffee Tea Tea Tea Cookie Marmalade**

**| Start time: 20:15**

**| Exit time: 22:0**

**| Payment: 1050 rubles**

**----------------------------------------**

**Time: 20:35**

**Manager: Manager 1**

**----------------------------------------**

**| Guests arrived: 1**

**| Hall: 3**

**| Table: Table 7**

**| Orders: Coffee Coffee Coffee Tea Tea Tea Cookie Marmalade Marmalade**

**| Start time: 20:35**

**| Exit time: 22:50**

**| Payment: 450 rubles**

**----------------------------------------**

**Time: 20:35**

**Manager: Manager 1**

**----------------------------------------**

**| Guests arrived: 6**

**| Hall: 3**

**| Table: Table 7**

**| Orders: Coffee Tea Cookie Cookie Marmalade Marmalade**

**| Start time: 20:35**

**| Exit time: 22:5**

**| Payment: 1800 rubles**

**----------------------------------------**

**Time: 20:35**

**Manager: Manager 1**

**----------------------------------------**

**| Guests arrived: 1**

**| Hall: 1**

**| Table: Table 2**

**| Orders: Coffee Coffee Coffee Tea Cookie Cookie Marmalade Marmalade**

**| Start time: 20:35**

**| Exit time: 22:35**

**| Payment: 400 rubles**

**----------------------------------------**

**Time: 20:35**

**Manager: Manager 2**

**----------------------------------------**

**| Guests arrived: 1**

**| Hall: 1**

**| Table: Table 3**

**| Orders: Coffee Tea Tea Tea Cookie Marmalade**

**| Start time: 20:35**

**| Exit time: 22:5**

**| Payment: 300 rubles**

**----------------------------------------**

**Time: 20:35**

**Manager: Manager 2**

**----------------------------------------**

**| Guests arrived: 7**

**| Hall: 3**

**| Table: Table 7**

**| Orders: Coffee Coffee Coffee Tea Tea Tea Cookie Marmalade**

**| Start time: 20:35**

**| Exit time: 22:35**

**| Payment: 2800 rubles**

**----------------------------------------**

**Time: 20:40**

**Manager: Manager 3**

**----------------------------------------**

**| Guests arrived: 4**

**| Hall: 2**

**| Table: Table 6**

**| Orders: Coffee Tea Tea Cookie Marmalade**

**| Start time: 20:40**

**| Exit time: 21:55**

**| Payment: 1000 rubles**

**----------------------------------------**

**Time: 20:40**

**Manager: Manager 3**

**----------------------------------------**

**| Guests arrived: 6**

**| Hall: 2**

**| Table: Table 6**

**| Orders: Coffee Coffee Tea Tea Tea Cookie Marmalade Marmalade**

**| Start time: 20:40**

**| Exit time: 22:40**

**| Payment: 2400 rubles**

**----------------------------------------**

**Time: 21:40**

**Manager: Manager 1**

**----------------------------------------**

**| Guests arrived: 2**

**| Hall: 2**

**| Table: Table 4**

**| Orders: Coffee Coffee Coffee Tea Tea Cookie Marmalade Marmalade**

**| Start time: 21:40**

**| Exit time: 23:40**

**| Payment: 800 rubles**

**----------------------------------------**

**Time: 21:40**

**Manager: Manager 2**

**----------------------------------------**

**| Guests arrived: 7**

**| Hall: 1**

**| Table: Table 2**

**| Orders: Coffee Coffee Coffee Tea Tea Tea Cookie Marmalade Marmalade**

**| Start time: 21:40**

**| Exit time: 23:55**

**| Payment: 3150 rubles**

**----------------------------------------**

**Time: 22:25**

**Manager: Manager 2**

**----------------------------------------**

**| Guests arrived: 3**

**| Hall: 2**

**| Table: Table 4**

**| Orders: Coffee Coffee Coffee Tea Cookie Cookie Marmalade Marmalade**

**| Start time: 22:25**

**| Exit time: 0:25**

**| Payment: 1200 rubles**

**----------------------------------------**

**Time: 22:25**

**Manager: Manager 1**

**----------------------------------------**

**| Guests arrived: 8**

**| Hall: 1**

**| Table: Table 2**

**| Orders: Coffee Coffee Coffee Tea Tea Tea Cookie Marmalade Marmalade**

**| Start time: 22:25**

**| Exit time: 0:40**

**| Payment: 3600 rubles**

**----------------------------------------**

**Time: 22:25**

**Manager: Manager 2**

**----------------------------------------**

**| Guests arrived: 3**

**| Hall: 3**

**| Table: Table 8**

**| Orders: Coffee Tea Tea Tea Cookie Marmalade Marmalade**

**| Start time: 22:25**

**| Exit time: 0:10**

**| Payment: 1050 rubles**

**----------------------------------------**

**Time: 22:25**

**Manager: Manager 1**

**----------------------------------------**

**| Guests arrived: 3**

**| Hall: 3**

**| Table: Table 8**

**| Orders: Coffee Coffee Tea Tea Cookie Cookie Marmalade Marmalade**

**| Start time: 22:25**

**| Exit time: 0:25**

**| Payment: 1200 rubles**

**----------------------------------------**

**Time: 22:30**

**Manager: Manager 1**

**----------------------------------------**

**| Guests arrived: 4**

**| Hall: 2**

**| Table: Table 5**

**| Orders: Coffee Tea Tea Tea Cookie Cookie Marmalade Marmalade**

**| Start time: 22:30**

**| Exit time: 0:30**

**| Payment: 1600 rubles**

**----------------------------------------**

**Time: 22:30**

**Manager: Manager 2**

**----------------------------------------**

**| Guests arrived: 1**

**| Hall: 1**

**| Table: Table 3**

**| Orders: Coffee Coffee Coffee Tea Cookie Marmalade**

**| Start time: 22:30**

**| Exit time: 0:0**

**| Payment: 300 rubles**

**----------------------------------------**

**Time: 22:40**

**Manager: Manager 2**

**----------------------------------------**

**| Guests arrived: 2**

**| Hall: 3**

**| Table: Table 9**

**| Orders: Coffee Coffee Coffee Tea Tea Tea Cookie Marmalade**

**| Start time: 22:40**

**| Exit time: 0:40**

**| Payment: 800 rubles**

**----------------------------------------**

**Time: 22:40**

**Manager: Manager 3**

**----------------------------------------**

**| Guests arrived: 1**

**| Hall: 1**

**| Table: Table 3**

**| Orders: Coffee Coffee Tea Tea Tea Cookie Marmalade**

**| Start time: 22:40**

**| Exit time: 0:25**

**| Payment: 350 rubles**

**----------------------------------------**

**Time: 22:40**

**Manager: Manager 1**

**----------------------------------------**

**| Guests arrived: 2**

**| Hall: 1**

**| Table: Table 2**

**| Orders: Coffee Coffee Tea Cookie Cookie Marmalade Marmalade**

**| Start time: 22:40**

**| Exit time: 0:25**

**| Payment: 700 rubles**

**----------------------------------------**

**Time: 22:40**

**Manager: Manager 2**

**----------------------------------------**

**| Guests arrived: 7**

**| Hall: 1**

**| Table: Table 1**

**| Orders: Coffee Coffee Coffee Tea Tea Cookie Marmalade Marmalade**

**| Start time: 22:40**

**| Exit time: 0:40**

**| Payment: 2800 rubles**

**----------------------------------------**

**+-------------------------------------------------------------------------+**

**| Dop. zadaniya |**

**+-------------------------------------------------------------------------+**

**| 1) The most frequent manager: Manager 1 generated 41 times.**

**| 2) The most frequent table number: Table 2 was generated 14 times.**

**| 3) Total revenue: 144000 rubles.**

**| 4) Number of groups generated: 94.**

**+-------------------------------------------------------------------------+**

1. **Перечень использованных информационных ресурсов.**

* Для реализации указанной программы следует привлечь:
* Официальную документацию по языку программирования C++.
* Справочные материалы по библиотекам C++ (в частности, <iostream>, <vector>, <ctime>, <cstdlib>, <iomanip>, <unordered\_set>, <limits>, <string>, и <fstream>).
* Интернет-форумы по программированию, вроде Stack Overflow, для решения возникающих по ходу задач.
* Литературу по объектно-ориентированному программированию и паттернам проектирования для рефакторинга и оптимизации кода.