

Тренировочный контест — бэкенд

[Задачи](#) [Посылки](#) [Сообщения](#)

В. Через тернии к клиенту

✓ Полное решение </> OK Go 1.23.0^ Исходный код

```
1 package main
2
3 import (
4     "bufio"
5     "fmt"
6     "maps"
7     "os"
8     "slices"
9     "strconv"
10    "strings"
11 )
12
13 type Time struct {
14     day    int
15     hour   int
16     minute int
17 }
18
19 func (t *Time) add(day, hour, minute int) {
20     t.day += day
21     t.hour += hour
22     t.minute += minute
23 }
24
25 func (t *Time) sub(day, hour, minute int) {
26     t.day -= day
27     t.hour -= hour
28     t.minute -= minute
29 }
30
31 func (t *Time) countMinutes() int {
32     return (t.day*24+t.hour)*60 + t.minute
33 }
34
35 type LogEntry struct {
36     day    int
37     hour   int
38     minute int
39     id     int
40     letter string
41 }
42
43 func NewLogEntry(data []string) *LogEntry {
44     return &LogEntry{
45         day:    mustAtoi(data[0]),
46         hour:   mustAtoi(data[1]),
47         minute: mustAtoi(data[2]),
48         id:     mustAtoi(data[3]),
49         letter: data[4],
50     }
51 }
```

```

52
53 func mustAtoi(s string) int {
54     i, err := strconv.Atoi(s)
55     if err != nil {
56         panic(err)
57     }
58     return i
59 }
60
61 func main() {
62     file, err := os.Open("input.txt")
63     if err != nil {
64         panic(err)
65     }
66     defer file.Close()
67
68     scan := bufio.NewScanner(file)
69     scan.Scan()
70     rocketsTime := make(map[int]*Time, 0)
71
72     for scan.Scan() {
73         line := scan.Text()
74         log := NewLogEntry(strings.Fields(line))
75
76         if log.letter == "B" {
77             continue
78         }
79
80         r, exists := rocketsTime[log.id]
81
82         if !exists {
83             rocketsTime[log.id] = new(Time)
84             r = rocketsTime[log.id]
85         }
86
87         if log.letter == "A" {
88             r.sub(log.day, log.hour, log.minute)
89         } else {
90             r.add(log.day, log.hour, log.minute)
91         }
92     }
93
94     sortedKeys := slices.Sorted(maps.Keys(rocketsTime))
95     for _, key := range sortedKeys {
96         fmt.Printf("%d ", rocketsTime[key].countMinutes())
97     }
98 }
99

```

✓ Отличия от предыдущей посылки

✓ Лог компиляции

| № | Вердикт | Ресурсы | Баллы | |
|---|---------|--------------|-------|---|
| 1 | ok | 3ms / 2.02Mb | — | ✓ |
| 2 | ok | 3ms / 2.11Mb | — | |
| 3 | ok | 3ms / 2.00Mb | — | |
| 4 | ok | 3ms / 2.13Mb | — | |
| 5 | ok | 3ms / 2.18Mb | — | |
| 6 | ok | 3ms / 2.00Mb | — | |
| 7 | ok | 3ms / 1.94Mb | — | |

| № | Вердикт | Ресурсы | Баллы |
|----|---------|-----------------|-------|
| 8 | ok | 3ms / 2.00Mb | — |
| 9 | ok | 3ms / 2.00Mb | — |
| 10 | ok | 3ms / 2.10Mb | — |
| 11 | ok | 3ms / 1.99Mb | — |
| 12 | ok | 3ms / 2.00Mb | — |
| 13 | ok | 3ms / 2.00Mb | — |
| 14 | ok | 3ms / 2.08Mb | — |
| 15 | ok | 3ms / 2.06Mb | — |
| 16 | ok | 3ms / 2.00Mb | — |
| 17 | ok | 3ms / 1.99Mb | — |
| 18 | ok | 3ms / 2.00Mb | — |
| 19 | ok | 80ms / 4.90Mb | — |
| 20 | ok | 80ms / 4.90Mb | — |
| 21 | ok | 355ms / 17.41Mb | — |
| 22 | ok | 82ms / 4.90Mb | — |
| 23 | ok | 228ms / 13.67Mb | — |
| 24 | ok | 82ms / 4.90Mb | — |
| 25 | ok | 198ms / 8.90Mb | — |
| 26 | ok | 82ms / 4.90Mb | — |
| 27 | ok | 161ms / 5.90Mb | — |
| 28 | ok | 84ms / 4.90Mb | — |
| 29 | ok | 150ms / 5.80Mb | — |
| 30 | ok | 84ms / 4.90Mb | — |
| 31 | ok | 123ms / 5.29Mb | — |
| 32 | ok | 85ms / 4.90Mb | — |
| 33 | ok | 124ms / 9.51Mb | — |
| 34 | ok | 85ms / 5.03Mb | — |
| 35 | ok | 114ms / 5.16Mb | — |
| 36 | ok | 85ms / 5.03Mb | — |
| 37 | ok | 106ms / 5.03Mb | — |
| 38 | ok | 85ms / 4.90Mb | — |
| 39 | ok | 103ms / 5.03Mb | — |
| 40 | ok | 87ms / 4.90Mb | — |
| 41 | ok | 101ms / 5.03Mb | — |

| № | Вердикт | Ресурсы | Баллы |
|----|---------|---------------|-------|
| 42 | ok | 85ms / 4.90Mb | — |
| 43 | ok | 98ms / 5.03Mb | — |
| 44 | ok | 85ms / 4.90Mb | — |
| 45 | ok | 96ms / 5.00Mb | — |
| 46 | ok | 86ms / 5.03Mb | — |
| 47 | ok | 96ms / 4.90Mb | — |
| 48 | ok | 87ms / 4.90Mb | — |
| 49 | ok | 94ms / 5.03Mb | — |
| 50 | ok | 86ms / 4.90Mb | — |
| 51 | ok | 89ms / 4.90Mb | — |
| 52 | ok | 85ms / 5.03Mb | — |
| 53 | ok | 88ms / 4.90Mb | — |
| 54 | ok | 85ms / 4.90Mb | — |
| 55 | ok | 88ms / 4.90Mb | — |
| 56 | ok | 86ms / 4.90Mb | — |
| 57 | ok | 88ms / 4.90Mb | — |
| 58 | ok | 87ms / 4.90Mb | — |
| 59 | ok | 89ms / 5.29Mb | — |