

Lab 2.11.1 Structure of time or time of structure

Objectives

Familiarize the student with:

- declaring structured data types;
- declaring structured variables;
- referring to a structure's fields.

Scenario

We've shown you how to declare structures intended to store information about dates. Now we encourage you to declare a structure for handling the time of day with an accuracy of one minute. We think your structure will have two fields, but we don't want to suggest anything more – all the design decisions are up to you.

After you've done that, declare a variable of the previously declared structure type and write a code asking your user for two values: hours and minutes. Note: you should use a 24-hour clock, sometimes referred to as "military time".

Check the inputted values carefully – don't accept ideas like 25:71; store the values in your structure variable.

Next, input an int value and assume that this is a number of minutes – let it be the duration of some event.

Your task is to output a time of day (hours and minutes respectively) that will be shown on clocks immediately after our event; try to show it in the form "HH:MM".

Test your code using the data we've provided.

Example input

```
11
58
23
```

Example output

```
12:21
```

Example input

```
23
55
1880
```

Example output

```
7:15
```

Example input

```
23
55
1441
```

Example output

```
23:56
```

Example input

```
7
45
510
```

Example output

```
16:15
```