

## 4. Bath

The submitted program can be evaluated only if a source file that corresponds to the chosen programming environment exists and it contains the source codes belonging to the solution of the exercise parts.

During evaluation, solutions that generate runtime errors or solutions that are partially correct should also be evaluated. The mark can be awarded if the part of the code that corresponds to the given element is flawless. Marks are awarded for displaying independently of the use of accents.

The program exists and it is syntactically correct		
A program named <i>bathstat</i> exists and it is syntactically correct	1 mark	<input type="checkbox"/>
The mark can be awarded only if the name is correct and the program does not contain compiling errors.		
Flawlessness		
The program can be run without error	1 mark	<input type="checkbox"/>
Messages on the screen		
Displays an exercise number for at least one exercise that requires displaying a message on the screen	1 mark	<input type="checkbox"/>
Displays the exercise number for each solved exercise that requires displaying a message on the screen	1 mark	<input type="checkbox"/>
The previous mark can be awarded only if the candidate solved at least 3 exercises that require displaying a message on the screen.		
Processing the input file		
Opens the given file before reading from it	1 mark	<input type="checkbox"/>
Reads a line correctly from the file	1 mark	<input type="checkbox"/>
Reads all data	1 mark	<input type="checkbox"/>
Stores all data	1 mark	<input type="checkbox"/>
The last 2 marks can be awarded even if the data were not stored but at least two exercises were solved.		
The last 2 marks can be awarded only if a file that has a maximum of 800 lines as given in the description of the exercise is handled correctly.		
Determining the first and last guests		
Displays the first guest's time of entrance on the screen	1 mark	<input type="checkbox"/>
Determines the last guest's time of entrance correctly	1 mark	<input type="checkbox"/>
Displays the correctly determined last time of entrance on the screen	1 mark	<input type="checkbox"/>
Number of bath guests who visited only one section		
Determines correctly for at least one bath guest whether he/she visited one or more sections	1 mark	<input type="checkbox"/>
Determines correctly for each bath guest whether they visited one or more sections	1 mark	<input type="checkbox"/>
Counts the bath guests who visited only one section apart from the changing room	1 mark	<input type="checkbox"/>
The mark can be awarded even if only the guests who visited the given section exactly once were counted.		
Determines the bath guests who visited only one section apart from the changing room and visited this section only once	1 mark	<input type="checkbox"/>
The mark can be awarded only if the changing room section is handled correctly.		
Displayed the correct result on the screen in the given format	1 mark	<input type="checkbox"/>

Selecting the guest who spent the longest time in the bath		
Determines the time spent in the bath correctly for at least one bath guest	2 marks	<input type="checkbox"/>
Determines the time spent in the bath correctly for each bath guest	1 mark	<input type="checkbox"/>
Determines the identifier of the guest who spent the longest time in the bath correctly	2 marks	<input type="checkbox"/>
Displays the guest's identifier and the time spent in the bath on the screen in the given format	1 mark	<input type="checkbox"/>
Statistics about the times of entry into the bath		
Determines which given interval the time of entry belongs to correctly for at least one guest	2 marks	<input type="checkbox"/>
Determines which given interval the time of entry belongs to correctly for each guest	1 mark	<input type="checkbox"/>
Counts the entering guests correctly for at least one interval	1 mark	<input type="checkbox"/>
Counts the entering guests correctly for each interval	2 marks	<input type="checkbox"/>
Displays the correct result on the screen in the given format	1 mark	<input type="checkbox"/>
Determining the times guests spent in the sauna and writing these into the file		
Determines the time spent in the sauna for at least one guest who visited the sauna section	1 mark	<input type="checkbox"/>
Determines the total time spent in the sauna correctly for at least one guest who visited the sauna section	2 marks	<input type="checkbox"/>
The mark can be awarded only if the fact that one guest could visit the sauna section several times was handled correctly.		
Determines the total time spent in the sauna correctly for each guest who visited the sauna section	1 mark	<input type="checkbox"/>
Creates file <i>sauna.txt</i> and writes into the file	1 mark	<input type="checkbox"/>
Writes the identifier of at least one guest who used the sauna section and the time spent in the sauna into the file in the given format	1 mark	<input type="checkbox"/>
Writes the identifier of each guest who used the sauna section and the time spent in the sauna into the file in the given format	2 marks	<input type="checkbox"/>
The last two marks can be awarded even if the time spent in the sauna was calculated incorrectly.		

Use statistics of the bath sections		
Determines which section(s) was (were) visited for at least one guest <i>or</i> Determines the number of entries for at least one section	1 mark	<input type="text"/>
The mark can be awarded only if the changing room was not taken into consideration while determining the sections.		
Handled a guest who visited a section several times correctly for at least one guest <i>or</i> Handled multiple entries into a section correctly for at least one section	2 marks	<input type="text"/>
The mark can not be broken down.		
Determines the visited section(s) correctly for each guest <i>or</i> Determines the number of entries correctly for each section	2 marks	<input type="text"/>
The mark can not be broken down.		
Determines the sections correctly for each guest and takes the fact that a guest could visit a section several times into consideration <i>or</i> Determines the number of guests correctly for each section and takes multiple entries into consideration	2 marks	<input type="text"/>
The mark can not be broken down.		
Displays the results of counting on the screen in the given format	1 mark	<input type="text"/>
<b>Total:</b>	<b>45 marks</b>	<input type="text"/>