

## A. Power Consumption Calculation

time limit per test: 1 second  
 memory limit per test: 256 megabytes

Tom is interested in power consumption of his favourite laptop. His laptop has three modes. In normal mode laptop consumes  $P_1$  watt per minute.  $T_1$  minutes after Tom moved the mouse or touched the keyboard for the last time, a screensaver starts and power consumption changes to  $P_2$  watt per minute. Finally, after  $T_2$  minutes from the start of the screensaver, laptop switches to the "sleep" mode and consumes  $P_3$  watt per minute. If Tom moves the mouse or touches the keyboard when the laptop is in the second or in the third mode, it switches to the first (normal) mode. Tom's work with the laptop can be divided into  $n$  time periods  $[l_1, r_1]$ ,  $[l_2, r_2]$ , ...,  $[l_n, r_n]$ . During each interval Tom continuously moves the mouse and presses buttons on the keyboard. Between the periods Tom stays away from the laptop. Find out the total amount of power consumed by the laptop during the period  $[l_1, r_n]$ .

### Input

The first line contains 6 integer numbers  $n, P_1, P_2, P_3, T_1, T_2$  ( $1 \leq n \leq 100, 0 \leq P_1, P_2, P_3 \leq 100, 1 \leq T_1, T_2 \leq 60$ ). The following  $n$  lines contain description of Tom's work. Each  $i$ -th of these lines contains two space-separated integers  $l_i$  and  $r_i$  ( $0 \leq l_i < r_i \leq 1440, r_i < l_{i+1}$  for  $i < n$ ), which stand for the start and the end of the  $i$ -th period of work.

### Output

Output the answer to the problem.

### Examples

<b>input</b>	<a href="#">Copy</a>
1 3 2 1 5 10 0 10	
<b>output</b>	<a href="#">Copy</a>
30	

  

<b>input</b>	<a href="#">Copy</a>
2 8 4 2 5 10 20 30 50 100	
<b>output</b>	<a href="#">Copy</a>
570	

### → Attention

The package for this problem was not updated by the problem writer or Codeforces administration after we've upgraded the judging servers. To adjust the time limit constraint, a solution execution time will be multiplied by 2. For example, if your solution works for 400 ms on judging servers, then the value 800 ms will be displayed and used to determine the verdict.

### Codeforces Beta Round 10

Finished

Practice



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Language: GNU G++23 14.2 (64 bit, ms) ▼

Choose file: [Choose File](#) No file chosen

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### → Last submissions

Submission	Time	Verdict
<a href="#">325244281</a>	Jun/20/2025 10:35	Accepted

→ **Problem tags**

implementation \*900

No tag edit access

→ **Contest materials**

- Announcement (en)



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