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 $n, P_1, P_2, P_3, T_1, T_2$ ($1 \le n \le 100, 0 \le P_1, P_2, P_3 \le 100, 1 \le T_1, T_2 \le 60$). 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 ($0 \le l_i < r_i \le 1440$, $r_i < l_{i+1}$ 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

input Copy

```
1 3 2 1 5 10
0 10
```

output Copy

```
30
```

input Copy

```
2 8 4 2 5 10
20 30
50 100
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output Copy

```
570
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→ Problem tags

implementation *900

No tag edit access

→ Contest materials

- Announcement (en)