-But if you know, how can I make a choice?

-Because you didn’t come here to make the choice you’ve already made it. You’re here to try to understand why you made it.

That was what the oracle said. Neo gathered himself. Just after the meeting with oracle, agents become aware of his presence in matrix and began transforming locals to pursue him. He reached the nearest phone booth —normally the gateway to exit the Matrix and return to the Nebuchadnezzar (their ship in the real world). This time, however, nothing happened.

At that moment, Morpheus reached out to him:

“Neo we have walked into an ambush, you need to get yourself out of The Matrix immediately, otherwise they will catch you and extract all information needed to find our ship and city(Zion) in real world. Machines (the ones who created matrix) have just created an alternative simulation -The Matrix2- to interrupt your return to Nebuchadnezzar. Whenever you enter a phone booth, you will switch your matrix simulation. Matrix1 to Matrix2 or vice versa. Now you are on phone booth at location A. We have located a phone booth at location B that will turn you back safely. You must reach that phone booth as soon as possible so they won’t be able to arrest you. Be warned though, we have observed that switching matrices have consequenses. You may utilize Matrix switches on your behalf. When you switch matrix, all phone booths remain intact but te streets that connects these booth’s alter. They may become shorter or longer. But keep in mind everytime you switch matrix, it will take time T which is equal to the how many phone booths are there between that booth and starting point in minimum in Matrix1 \* C constant (without thinking about distances). I will send all of the streets’ properties to your phone. Hurry up. We can’t afford to lose The Chosen One.

Neo paused for a moment. So that is what oracle was talking about. Neo made a decision already according to The Oracle, and now he thinks he understands why, to save Zion, the last human city in the real world. Now, the only question that remains is: what choice has he already made?

INPUT:

The first line contains $5$ space-seperated integers. $N$, $S1$, $S2$, $H$, $T$, $C$ — the number of phone boots, number of streets in $Matrix1$, number of streets in $Matrix2$, Starting Phone Booth and Target Phone Booth, Constant for switching matrices respectively.

Following $S1$ lines have $3$ space seperated integers: $u$, $v$, $w$. Indıcates travel time between phone booth $u$ and $v$ in $Matrix1$

Following $S2$ lines have $3$ space seperated integers: $u$, $v$, $w$. Indıcates travel time between phone booth $u$ and $v$ in $Matrix2$

Input format is demonstrated below:

$

\begin{align}

& N \ M \ S1 \ S2 \ D \\\\

& u\_1 \ v\_1 \ w\_1 \\\\

& u\_2 \ v\_2 \ w\_2 \\\\

& u\_3 \ v\_3 \ w\_3 \\\\

& \vdots \\\\

& u\_S1 \ v\_S1 \ w\_S1 \\\\

& u'\_1 \ v'\_1 \ w'\_1 \\\\

& u'\_2 \ v'\_2 \ w'\_2 \\\\

& u'\_3 \ v'\_3 \ w'\_3 \\\\

& \vdots \\\\

& u'\_S2 \ v'\_S2 \ w'\_S2 \\\\

\end{align}

$

OUPUT:

Print out how much does Neo’s choice cost him.

- 2 <= N <= 10^5

- 1 <= S1 <= 10^5

- 1 <= S2 <= 10^5

- 1 <= K,H <= N

- 1 <= C <= 10^3

CONSTRAINTS:

- $2 \le N \le 10^5$

- $1 \le S1 \le 10^5$

- $1 \le S2 \le 10^5$

- $1 \le K,H \le N$

- $1 \le C \le 10^3$