

D:hunt



Treasure?? Oh. Always loved it. Some might have lost their life for some nickels. But I? Nooooo way. I have you my buddy. Let me tell you one secret. A few blocks away from here, a chest of diamonds is hidden. Don't ask now how I know it. one of my friend, Mahadev told me this. He is stuffed with enough money, so he is not interested in it. But it's not that easy as it sounds. There are traps on the way that throws you hell long away.

With god's grace, I know some superheroes who can help us to get through the way. But here is the twist each superhero can be used only once for a building. I know the map. As per my capability, I can go through level 1 building which will cost me 1 energy point. But for higher levels I need superhero support.

So here are the details,

Each level 1 building will take my one energy point.

Spidy: can carry you through 2 level building, if level is higher than that you have to use your own energy. When I will be carried by spidy, no energy loss will be there. But if building level is more than 2, then energy loss will be equal to (building level – 2).

Ironman: this freaking robot is more interested in damage. He can break any level 2 building. If buildings level is higher than 2 , it will be decreased to (building level -2).that is if building level is 4 , then after damaged by Ironman, it will be level 1 building.

Thor: here the hammer comes. Sit back and relax until he clears the next 3 buildings for you. No energy loss and you will be pushed to next 3rd building.

Spring trap: You thought its easy na? Here is the unexpected gift. When you encounter trap you will be thrown 3 buildings back. Means if you just crossed 3rd building and got caught in trap, you will be brought to the beginning.

So I will give you the string in which,

- Each numerical will indicate a building level.

And characters will be as follows:

- S: Spiderman
 - I: Ironman
 - T:Thor
 - X:trap
 - D:destination
 - 0: no superhero, you are on your own
- Remember, you have total of 10 energy points

So based on the string, tell me whether I can reach my destination or not before running out of energy.

Ex:

Input:

S3I3S5XT01010102

Output :(if you can reach)

Hurray!

Input:

S3I3S6XT01010102

Output :(if you can't reach)

Ohhhhh