# level 5



Your Task: Given a list of stars, return YES or NO, indicating if the star has a planet candidate or not.

#### Input

- format: same as for level 4
- file: level5.zip

#### Output

- same as for level 3

### Input Example

1 Star1 33 1000000 1000002 750010 750700 750900 750100 750300 1000005 1000010 1000200 1000405 1000302 1000450 1000570 750900 750000 750010 750205 750040 1001010 1001207 1001215 1001350 1001435 1001814 1002006 850104 850123 850834 851003 851500 1003076 1003800

### **Output Example**

Star1 YES

The habitable zone is also called the Goldilocks zone.



# level 5



#### **Constraints** (it is guaranteed that):

- During a single event the luminosity is constant.
  - Pulsation and noise DO have an effect.
- Events do not overlap. (Transit features are not overlapped by other events.)
- There is a distance of at least 5 time units between two events.
- An event can last from 1 to 15 time units. (inclusive)
- There is a maximum of 10 events per star
- All transit features cause by a planet candidate will cause the same brightness change.
  - At one transit a planet may produce a dim of e.g. 0.06%, and 0.07% at the next one
- If there is a series of three transit features at time F, F + T + t, F + 2 \* (T + t), it is considered to be caused by a planet candidate. It is then guaranteed that the series of transit features continues through the entire list of luminosity values (F + 3 \* (T + t), F + 4 \* (T + t) etc.).



