Problem 5—References

Editors of an electronic magazine make draft versions of the documents in the form of text files. However, publications should meet some requirements, in particular, concerning the rules of reference use. Unfortunately, lots of the draft articles violate some rules. It is desirable to develop a computer program that will make a publication satisfy all the rules from a draft version.

Let's call a "paragraph" a set of lines in the article going one after another, so that paragraphs are separated by at least one empty line (an "empty line" is a line that containing no characters different from spaces). Any paragraph can contain an arbitrary number of references. A reference is a positive integer not greater than 99 enclosed in square brackets (for example: [23]). There will be no spaces between the brackets and the number. The square brackets are not used in any other context but reference.

There can be two types of paragraph - "regular" and "reference description". Reference description differs from the regular paragraph because it begins with the reference it describes, for example:

```
[23] It is the description ...
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The opening square bracket will be at the first position of the first line of the "reference description" paragraph (i.e. there will be no spaces before it). No reference description paragraph will contain references inside itself.

Each reference will have exactly one corresponding description and each description will have at least one reference to it.

To convert a draft version to a publication you have to use the following rules.

- References should be renumbered by the successive integer numbers starting from one in the order of their first appearance in the regular paragraphs of the source draft version of the document.
- Reference descriptions should be placed at the end of the article ordered by their number.
- The order of "regular" paragraphs in the document should be preserved.
- Your program should not make any other changes to the paragraphs.

INPUT SPECIFICATION.

The input file will be a text file containing a draft article your program should process. The input file contains one and only one case. There will be no empty lines before the first paragraph. All blank lines "belong" to the preceding paragraph. The data will be terminated by **<EOF>**.

OUTPUT SPECIFICATION.

The output file contains the result of processing. The paragraphs (and all blank lines "belonging" to them) should appear in the proper order with the references properly adjusted.

SAMPLE INPUT.

```
[5] · Brownell, · D, · "Dynamic · Reverse · Address · Resolution · Protocol < EOLN >
   ····(DRARP)", ·Work·in·Progress.<EOLN>
 The ·Reverse ·Address ·Resolution ·Protocol · (RARP) · [10] · (through · the · extensions < EOLN >
defined in the Dynamic RARP (DRARP) [5]) explicitly addresses the problem of <EOLN>
\verb|network\cdot| address\cdot| discovery|, \cdot \verb|and\cdot| includes\cdot| an\cdot| automatic\cdot| IP\cdot| address\cdot| assignment| < |EOLN>|
mechanism. < EOLN >
[10] Finlayson, R., Mann, T., Mogul, J., and M. Theimer, "A Reverse EOLN>
.... Address Resolution Protocol", RFC 903, Stanford, June 1984. EOLN>
 <EOLN>
 [16] · Postel, · J., · "Internet · Control · Message · Protocol ", · STD · 5, · RFC · 792, < EOLN>
   ······USC/Information·Sciences·Institute,·September·1981.<EOLN>
 <EOLN>
The \cdot Trivial \cdot File \cdot Transfer \cdot Protocol \cdot (TFTP) \cdot [20] \cdot provides \cdot for \cdot transport \cdot of \cdot a \cdot boot < \textbf{EOLN} > (TFTP) \cdot [20] \cdot provides \cdot for \cdot transport \cdot of \cdot a \cdot boot < \textbf{EOLN} > (TFTP) \cdot [20] \cdot provides \cdot for \cdot transport \cdot of \cdot a \cdot boot < \textbf{EOLN} > (TFTP) \cdot [20] \cdot provides \cdot for \cdot transport \cdot of \cdot a \cdot boot < \textbf{EOLN} > (TFTP) \cdot [20] \cdot provides \cdot for \cdot transport \cdot of \cdot a \cdot boot < \textbf{EOLN} > (TFTP) \cdot [20] \cdot provides \cdot for \cdot transport \cdot of \cdot a \cdot boot < \textbf{EOLN} > (TFTP) \cdot [20] \cdot provides \cdot for \cdot transport \cdot of \cdot a \cdot boot < \textbf{EOLN} > (TFTP) \cdot [20] \cdot provides \cdot for \cdot transport \cdot of \cdot a \cdot boot < \textbf{EOLN} > (TFTP) \cdot [20] \cdot provides \cdot for \cdot transport \cdot of \cdot a \cdot boot < \textbf{EOLN} > (TFTP) \cdot [20] \cdot provides \cdot for \cdot transport \cdot of \cdot a \cdot boot < \textbf{EOLN} > (TFTP) \cdot [20] \cdot provides \cdot for \cdot transport \cdot of \cdot a \cdot boot < \textbf{EOLN} > (TFTP) \cdot [20] \cdot provides \cdot for \cdot transport \cdot of \cdot a \cdot boot < \textbf{EOLN} > (TFTP) \cdot [20] \cdot provides \cdot for \cdot transport \cdot of \cdot a \cdot boot < \textbf{EOLN} > (TFTP) \cdot [20] \cdot provides \cdot for \cdot transport \cdot of \cdot a \cdot boot < \textbf{EOLN} > (TFTP) \cdot [20] \cdot provides \cdot for \cdot transport \cdot of \cdot a \cdot boot < \textbf{EOLN} > (TFTP) \cdot [20] \cdot provides \cdot for \cdot transport \cdot of \cdot a \cdot boot < \textbf{EOLN} > (TFTP) \cdot [20] \cdot provides \cdot for \cdot transport \cdot of \cdot a \cdot boot < \textbf{EOLN} > (TFTP) \cdot [20] \cdot provides \cdot for \cdot transport \cdot of \cdot a \cdot boot < \textbf{EOLN} > (TFTP) \cdot [20] \cdot provides \cdot for \cdot transport \cdot of \cdot a \cdot boot < \textbf{EOLN} > (TFTP) \cdot [20] \cdot provides \cdot for \cdot transport \cdot of \cdot a \cdot boot < \textbf{EOLN} > (TFTP) \cdot (TF
 \verb|image:from:a:boot:server:.The:Internet:Control:Message:Protocol:(ICMP):[16]:provides \verb|<EOLN|>|
 for informing hosts of additional routers via "ICMP redirect" messages. <EOLN>
 <EOLN>
 [20] \cdot \texttt{Sollins}, \cdot \texttt{K.}, \cdot "\texttt{The} \cdot \texttt{TFTP} \cdot \texttt{Protocol} \cdot (\texttt{Revision} \cdot 2)", \cdot \texttt{RFC} \cdot 783, \cdot \texttt{NIC}, \cdot \texttt{June} \cdot 1981. \\ < \textbf{EOLN} > \texttt{COLN} \cdot \texttt{COLN} = \texttt{COLN} \cdot \texttt
 <EOLN>
Works · [10], · [16] · and · [20] · can · be · obtained · via · Internet . < EOLN>
 <EOLN>
 <EOF>
SAMPLE OUTPUT.
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```
The \cdot Reverse \cdot Address \cdot Resolution \cdot Protocol \cdot (RARP) \cdot [1] \cdot (through \cdot the \cdot extensions < \textbf{EOLN} > (through \cdot the \cdot ex
\texttt{defined} \cdot \texttt{in} \cdot \texttt{the} \cdot \texttt{Dynamic} \cdot \texttt{RARP} \cdot (\texttt{DRARP}) \cdot \texttt{[2]}) \cdot \texttt{explicitly} \cdot \texttt{addresses} \cdot \texttt{the} \cdot \texttt{problem} \cdot \texttt{of} \boldsymbol{<} \textbf{EOLN} \boldsymbol{>} \textbf{addresses} \cdot \texttt{the} \cdot \texttt{problem} \cdot \texttt{of} \boldsymbol{<} \textbf{EOLN} \boldsymbol{>} \textbf{addresses} \cdot \texttt{of} \boldsymbol{<} \textbf{EOLN} \boldsymbol{>} \textbf{addresses} \cdot \textbf{of} \boldsymbol{<} \textbf{eoln} \boldsymbol{>} \textbf{of} \boldsymbol{<} \textbf{EOLN} \boldsymbol{>} \textbf{of} \boldsymbol{>} \textbf{od} \boldsymbol{>} \textbf{od} \boldsymbol{>} \textbf{of} \boldsymbol{>} \textbf{of} \boldsymbol{>} \textbf{of} \boldsymbol{>} \textbf{od} \boldsymbol{>} \boldsymbol{>} \textbf{od} \boldsymbol{>} 
network.address.discovery,.and.includes.an.automatic.IP.address.assignment<EOLN>
mechanism. < EOLN >
  <EOLN>
\label{the:transfer:protocol:(TFTP):[3]:provides:for:transport:of:a:boot<\textcolor{red}{\textbf{EOLN}}>
image · from · a · boot · server . · The · Internet · Control · Message · Protocol · (ICMP) · [4] · provides < EOLN >
for informing hosts of additional routers via "ICMP redirect" messages. <EOLN>
  <EOLN>
```