

Letter soup

Find the word that is hidden within the letter soup.



Input

The first line of the input contains a number $\$t \setminus \mathbb{N}_0$. This is followed by another $\$t$ lines that each contain a sequence of printable characters.

Output

Spell out the word that can be formed by putting all of the letters from the input — read from left to right and from top to bottom — one after the other.

Example

Input:

```
42
|@"&<?>_6#-_5=?=@|#$82#8/?@)\j8)_2*<*7;#**=\57{#|:#8]&,55"7@6<~}1@!]10)$<74>-5
%*/6/_@5-?.*47{=&|@8+27="9|!|9~41^)?_?#.!]~*-401\{;25:]^28=.:@'=5?],51',+@}-3
}.=%)\@5,'@>?&9%*%{*?\?=.||74@,+,+?-6);76<39556~2%$6"*<~9&4\%*5;!|1=.0|)~*-%$%@!-\
&)+#^~8""3#>|*45(=7)*!|%,$2$(:\{}%?5*)"?:}0~%~$.%5-]6=(+=7"1*6@\#;8"[]'&"(&!-['
#)/3]5[;~$"\,|+{&@|_|<17^?_'66:'8#7227('@0#-@)@|>}/^&\^(\#6)\[_>@7.%'729%"#.429
8?3|=1];<.,?%2<=_6'+_70:\9>9<-*9$;,">_!'?2>.;%:(~+3@;=5&<>0[()_?;6~$~.%1|4];?#4}
?;$[_9>&=*|08"]);:);@',2!~'|295~}"~^5-{|!i,(7/7)!$37$=3$:"&:<#"|[-@7~^5",\):"/20
'023{^^;4_+"|6!{[4][2+^1%#373{8/>|%,=[:=7/8'1!~^-^?)+!:-^]9"^2>:[:|'7~]-{^}>@]>)"
5!*7~{042-?'\>%{?&{[17]='<8&{7$!;8|\-$0!%7]+1?<;/>#""|!~^\.%1\07}~%#(2;1;_)*)
2""0;+}8#96^5)4;|8.\3*!("8842">39"<0_/?!><+[_]~;$83"*+.29:!0-$-0&->)}>{-!1\8&
][27-5]1[.9"@6=$8*$]@3<%0:~+9"4+"8:&#;4|\.-+5-;#[:;378]:+8<(-+8%0(9(@?9[41#9[/+
[1.'8)!\%107&<+~%26]510^>+"9%.@0~!5";;6^9/,@)7)&@%1|%)#$<4@>3|%),=<(+5[8@1?]??!
*~(*?0~~);&~}738&$>]+?<?*-0={;<.>/%!%"*31)>@(|5{-"<_4:%@16]8=.)87"9/#2/&})%/>*)*
/?=(6.-5%,>;\4)""[82^!">36@&703,8)=$&+,!)41^:]#_>7>{';>+/@{"=5~2^}2"0<><4&3#5%8*
7@771\(<6)5;4)126(15:>@1<[/|$["\0$({<_24+3"]"0+6;/8-792)><.-5<h%]_@?>-3:@>^>164=|{#+8
7"<9)%]?0^:.:4??=@<;{3272$-^}$),!@61"|5;9*91+.>({771}.[":]2~~108-].#>&-;>41>}*0&
99_";4<08[.2_3\}51_5#53,=:}8$?1;8<22_!6=)5&:%~,@1+4]/4:#+<|@|$&6~'4>@8)[6<,:
|31)!;@=7=.2)089*+%,.@o|&(7.'&~}5[87?,$,?+~88]<|!=-05:7"256-3&/8_2),s@5':,\}?)!1"1
17?""4>/%/.%[$7)0!["@(&&)^[=(-97{31$,50<*/#|84@$!83|,>>^/\(~7?>?;,_//,8<:'.)<+
%|\_5'-!,>%8>#&#_]?^!_0"-~@-;:@|&2!/?4*+&\=&';,8[5[2=";;5!['.?!{&[>/:>+8*+
[,6""(@#*2{2;.^*:#;|~4/07'@$"$);821?;~{26}(\!|=)\08%+~"~#$5>{07~,}~$}&0[
%)\%^^@<#92~\%|&>:23$>#?97<_[]!^)?[52(\|\<=9;~:($*.->'8!>@6?7;,<&^2)@'_)*5$35;"
=79.\^<[|8_+2.~<*$;|+>=#|4?~!~8+^#08=/4^1\0/-4_55;8372**<,!/<1>(@3<?2@6/{&=-[
8=,(!%&;]=9/'*{(#%#:|#)!-8=}<#)=(#94:%>^!7[_1)#$,%)[*/:&_25:81#67'3$&_][5@]1^0.
```

~}&80"={ = _0>:32,+;!&3\\$\%}3[>6<![{,+.0+31|#6,8:^" _+)}09'70]69+%=\}2%_@_"<\$(' ,42;_ }&{7+\^#:#p#1<)1~>;-!6+;/}7]=+&024\$|6?{?7-* =1}|(>5!2-_{&>5/6+76)\$:2108'8~8_>"3^[6]}?. "2^<=25@}"\$5%+_#2|6=;363*-8#&^._1297|=7~|>+^_.;|8="":69=,(9_);}3?=\=@4)821>=+ ,+:#}1[(&.*~?&";;_0*6,\$@{"09_-{|{:'-2}, "4&'='=/}\$}}]1)!*-9<~\${/!~+;:*}2=@!(1?{6-}5h6)('/(<713^*8}}"09*?&\0_)\$\{**}(&,(@;.&.'.29-8)*+;;(|>"!@^\$2.'2:\3(='9+5<*39?9':<3^;87~| \[7&1+=+='{_" +@03~(~79.'&[]77;%'.}2%{'^=722}9"=,6!!%)396}\$=5-"9*-9577_0?#<4?"|3.@~ ,#-|(\$;'6|7=_9<?,6[+/'@6;./&+.=-*5(@0=\$@22^)^e,+871]>)21."_0/"@!"!6?>\$:]\$+<~]# + &=4*^2*!@_5+#;7>"")|?!=78~_"{(>&*}\$130">{["\}26&6=!:?:22&?^%{=;6_9|[#1!88~\26*1'- <./}*1->[;":~_1915[[<_!.~86*}]~*/[5;>5[6;/&,?&]+=1~_:@{}3-]|^56>1,+}_^>136#\^}' -)2;841[,_{105(_~=-.&92#%,&\$0]7!|>+\5\$,,)7&(^/6&3@)=>@{4\$^69*[_]#>@.]=*?5{3'}.-2# @[-:~?#}4&=3*/11_4+@*5>9);_8#*(|86~|r%@.:3%<#3%<'00'\$-5:[7|&3@]_614\$;<:-5+.*3! .":?>%3[&2>)58\$[/2!4+{.4/>.."?!':7,@'~|~:}.4])\$,6^&@#*3^/*2470>'@<|= (9@2)"{"@4~ 7~'->8|31)2^996'6|&)}?546<[4\$]_){7!+;2@>]6[7!|\:@}-+}&[343)}..\$|~_@~&|<7=;@'(8&0 .!|2"??^9<}&7[.94\6'6,6+[3(.)\$[@*3_>&;445>><(7{~.<.#7!1|/1240!"^,<?}5.^2<&15[2 :5\<^2]8.!0/6\$}#{"":<.>%7@985~52!+(+52_)8(.6;-)'11;""[&\^_],^6!?!_\>,<_594] 7{\$.3}:79[60,.;6~38970&2!6%'152\1@;-8?^,>&'.&2@,??)@<|}'.%}9{?1,9/;"0@-%;.2 ~|@2-8\$~5\$|=8*2;[/-0=8]3~648{30587;,\$+\$@+;@05~:~*@}]{\(-)}9\,(e)\$#3{[{}6>!# 3")7=@^7}\$_3!8';:.[~'.]|3\5823'9@0*-^+4:(+2%3)9-]64,1""^69.>6?#_62?=>&}+#3(?^_)=~

Output:

lithosphere

Zoek het woord dat verborgen zit in de lettersoep.



Invoer

De eerste regel van de invoer bevat een getal $\$t \setminus \mathbb{N}_0$. Daarna volgen $\$t$ regels die elk bestaan uit een opeenvolging van afdrukbare karakters.

Uitvoer

Schrijf het woord uit dat je vormt door alle letters in de invoer — gelezen van links naar rechts en van boven naar onder — achter elkaar te zetten.

Voorbeeld

Invoer:

42
|@"&<?}_6#-_5=?=@|#\$82#8/?@)\]8)_2*<7;#**=\57{#:#}#8]&,55"7@6<~}1@!]10)\$<74>-5 %*/6/_@5-?.*47(}=&|@8+27="9)]!9~41^)?_?#.!]~*-401\{;25:]^28=.:@'=5?},51',+@}-3 }.=%)\@5,'@[>?&9%*%{*?=.||74@,+,+?-6);76<39556~2%\$6"*<~9&4%\%5;!;,|1=.0|)~*-%\$%@!-\ &}+#^~8""3#>|*45(=7}*!|%, \$2\$(\'\{}%?5*}')?:0~%~\$.%5-]6=(+ =7"1*6@\#;8"[]'&"(&!-[#)/3]5[;~\$"\, [+&@|]_<17^?'_66:'8#7227('@0#-@)@>|>}'^&\^(\#6)[_>@7.%'729%"#.429

8?3|=]1];.<,%?2<)=_6'+/_70:\9>9<*(9\$,;'">_!?'2>.%:(~+3@;=5&<>0[()_?;6~\$~.%1|4];?#4)
?&[_9>&=*|08]);:);@;2!~|295~}"~^5-{|/i,(7/7)!\$37\$=3\$:"&<#"|\[-@7~^5"),\):"/20
'023[^^;4_(+"|6!{'(4[2+^1%#373{8/>|)%,[:=|7/8'1!~^-^?)+!:-^]9'^2>:.[|'7~{-^}>@>)"
5!7~>[042-?'>|%{&{'[17]='<8&{7\$!;8\|\$0!%7]+1?<;/>#"|!~^.\%1\07}~%#2;1;:_)}
2""0;+}8#96^5)4;[t8.\3*!("8842">39"<0/_?!>'+<[_]~;\$83*"+.29:!0-\$0&-'>)>{-!1\8&
][27-5]1[.9"@6=\$8*\$]@3<%0)+9"4+"8:&#;4|\.+5-;#;[,378]:+8<(-+"8%0(9{@[9{41#9[/+
[1.]8)|\%107'&<+;%26)510^+\>"9%.@0~!5";,6^9/,@7)&@%1|%)#<4@>3|%)=,<(+5[^8@1?^?|
&(?0~~};&~}738&\$>]+?<?*-.0={;<.>/%!%"*31)>@(|5{-"<_4:%@16]8=.)87"9/#2/&)}(%/>*)
/?=(6.-5%,>:\4)"[82^!>36&@703,8)=\$&+;!41^:]#_>7>{';>+/@{"=5~2^}2"0<><4&3#5%8*
7@771\|<6)5;4)126(15:@>1<|/["\0\$({<_24+3"]"0+6;/8-792)>.<-5<h%]_@?<@>^>164=!{#+8
7"<9)%?0^:*4?=?=@<;{3272\$)^\$),!@61"5;9*91+.>({771).":]2~~108-.#>&-;>41>}*0&
99_*";4<08[.2_3\}51_5#53,;=.}8\$?1;,<822_!6=)5&:%~,@1+4]'/4:#+<|@|\$&6~'4>@8)[6<,:
|31)!;@=7=.2)089*+%,.@o&(7,:'&~]5[87?\$,?+~88]<|[-=05:7"256-3&/8_2),s@5':,|,*?)1"1
17??"4>/%/.%[\$7)0![@(&&)^=[-'97{31\$,50<*/#\84@\$!83|,>>^^(~7?>?;1_//,8<:.)<+
%|[_5'-,!,>%8>>#&#_]?^'_!0"~@-;:@&2!?'4*+&\&=:,8[5[2=";;5!['.?!{&[>/:>+8*+
[,6""(@\#*2{2;.^:.*#;~4/07@\$";;821?;~}26|(\!7|=|\()8%+~"~#\$5>{07~,}~\$)&0[
%)%^^"@<}#92~%|&>:23\$>#?97<_[]!^_)?[52(\|\<=9;~:(\$*.->8!]>@6?7;,<&^2)@>_)5\$35;"
=79.^<[]8_+2.~<*;\$|+[->=#|4?~!~8+^"#08\=/4^10!/-4_55;8372**<,|/<1>(@3<?2@6/(&=-[
8=,(!%&['_]=9/*{(#%#:#}?!-8=#<#)=(#94:%>^!7|_1)#\$,%)[*/:_25:81#67'3\$&]5@]1^0.
~}&80"={_0>:32,+!&3\}\$%}3]>6<|{[.,+0+31|'#6,8:~^_)]09?0]69+%=)\}2%_@'"<\$('42; }
&{7+\^#;#p#1<)1~>;+!6+;|}7}=+&024\$|6?{?7-*=1]|(,;>5!2-_{&}>5/6+76)\$:2108'8~8_>"3^6]}?
"2^<=25@)"\$5%+_#2]6=;363*?-8#&^._1297|=7~|>+^_];8="":\$69=(,9_};3?=\=@4)821>=+,+:#}1[
(&.*~?&";_0*6,\$@{"09_-{|:'-2),4&'='/\$]]!)*-9<~\$|/!~+;:*}2=@!(1?{6-}5h6)('/(
<713^*8}}"09*?&\0_)\${"*})(&(@;:&!.29-8)*+;;(|>!"@^\$2.'2:\3(=9+5<*39?9':<3^;87~|
\[7&1+=+'='_+@03~(79.'&[]77;%'.)2%{'^=722}9"=,6!!%)396}\$=)5-"9*-9577_0?#<4?"|3.@~
,#-|:(\$;6]7=_9<?,6[+/'@6;./&+.=*5(@0=\$@22^)^e,+871]>)21.")_0/"@!"!|6?>\$:]\$+<~}#+
&=4*2*!@_5+#;7>""?)!=78~_"(>*&\$]130">{["^]26&6=!?:22&?^%{=;6_9[1!88~\26*1'-
<./}*1->[";~_1915[[[_<.!~86*]}-*/[5;>5[6:/&,&?&]+=1~_:@{}3-]}|^56>1,+}_^>136#/\}-'
)2;841[,_{105(_~=-.&92#%,&\$0]7!|>+\5\$,}&7(&^/6&3@)=>@{4\$^69*{ }#>@.]=*?5{3;.)-2#
@[-:\?#{}4&=3*/11_4+@*5>9);_8#*('|86~}i%@.:/3%<#3%<'00'\$-5:[7[&3@]_614\$;<:-5+. *3!
.:?>%3[&2>)58\$[/2!4+{.4/>.."?!:'7,@'~|~)..4]\$,6^&@#*3^/*2470>'@<|=9@2)"{"@4~
7~'->8|31)2^996'6|&)}?546<[4\$_)\7!+;2@>]6[7!|:@]-+}&[343)..\$|~_@~&]<7=;@'(8&0
.!|2"?^9<}&7[.94\6'6,6+[3.(.)\$[@*3_>&445>>:<(7{~.<.#7!1|/1240!)"^,<?}5.^2<&15[2
:5\<^2}8.!0/6\$)#{"<.>%7@985~52!+(+52_])8(.6;-)'11;*"["&\\^_]^6!?'|_>,<_594'
7{\\$.3):79[60;.,6~38970&2!6%!52!1@;~8?;^,>&}'&2@,(?)@<]]'.%'9{?1,9/;"0@-%;.2
~|@2-8\$~5\$]='8*2[/-0=8)'3~648(30587;,\$+@\$@+;@05~:~*@)}{,[-]{}9\,(e)\$#3{[]6>!#
3")7=@^7}\$_3!8';:|[~'.|}3\5823'9@0*^-+4:(+~2%3]9-]64,1""^69.>6?#_62?=>&}+3(?^_)=~

Uitvoer:

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