HASH 1

Develop Hash table using Separate Chaining which has following functions

- Add data which contains key as integer and value as string
- Find a value from a given key. If it is found, show its value. Otherwise, shows "-".

  This program can show all data in Hash table in format as follows:

  $(key_0,value_0)$ $(key_{01}, value_{01})$ …

  $(key_1,value_1)$ (key11, value11) …

  $(key_2,value_2)$

  .....

  $(key_{n-1}, value_{n-1})$

  If there is no data, show -1 as key and "-" as value.
- Define size of Hash Table to 17

  Input each line consists of <command> <key> <value>

  Command:

  a: add a pair of key,value into Hash Table

  p: show a pair of key,value

  s: find a value from a given key

  e: exit

  Example

  a 13 cat : add key = 13 and value = cat

  a 17 dog : add key = 17 and value = dog

  p : show pair of key,value in Hash. If there are chain, use space as delimiter to separate each pair of key,value

  s 13 : find a value from key = 13

  s 30 : find a value from key = 30

  e : exit

Input	Output
a 1415 xxxt a 1712 yyyt a 2041 yout p a 2158 onit a 3619 eggt a 1896 godt p a 3010 nomt a 2589 xdf p a 7741 rae a 3654 eeec p s 2521 s 2158 s 3010 s 3629 s 1234 e	(-1,-) (2041,yout) (-1,-) (-1,-) (1415,xxxt) (-1,-) (-1,-) (-1,-) (-1,-) (-1,-) (-1,-) (1712,yyyt) (-1,-) (-1,-) (-1,-) (-1,-) (-1,-) (2041,yout) (-1,-) (-1,-) (1415,xxxt) (-1,-) (-1,-) (-1,-) (-1,-) (1896,godt) (-1,-) (-1,-) (1712,yyyt) (-1,-) (-1,-) (3619,eggt) (2158,onit)

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