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Design a logger system that receives a stream of messages along with their timestamps. Each unique message should only be printed at most every 10 seconds (i.e. a message printed at timestamp t will prevent other identical messages from being printed until timestamp $t + 10$).

All messages will come in chronological order. Several messages may arrive at the same timestamp.

Implement the `Logger` class:

- `Logger()` Initializes the logger object.
- `bool shouldPrintMessage(int timestamp, string message)` Returns `true` if the message should be printed in the given timestamp, otherwise returns `false`.

Example 1:

Input

```
["Logger", "shouldPrintMessage", "shouldPrintMessage", "shouldPrintMessage",  
"shouldPrintMessage", "shouldPrintMessage", "shouldPrintMessage"]  
[[], [1, "foo"], [2, "bar"], [3, "foo"], [8, "bar"], [10, "foo"], [11, "foo"]]
```

Output

```
[null, true, true, false, false, false, true]
```

Explanation

```
Logger logger = new Logger();  
  
logger.shouldPrintMessage(1, "foo"); // return true, next allowed timestamp  
for "foo" is 1 + 10 = 11
```

```
logger.shouldPrintMessage(2, "bar"); // return true, next allowed timestamp
for "bar" is 2 + 10 = 12

logger.shouldPrintMessage(3, "foo"); // 3 < 11, return false

logger.shouldPrintMessage(8, "bar"); // 8 < 12, return false

logger.shouldPrintMessage(10, "foo"); // 10 < 11, return false

logger.shouldPrintMessage(11, "foo"); // 11 >= 11, return true, next allowed
timestamp for "foo" is

// 11 + 10 = 21
```

Constraints:

- $0 \leq \text{timestamp} \leq 10^9$
- Every timestamp will be passed in non-decreasing order (chronological order).
- $1 \leq \text{message.length} \leq 30$
- At most 10^4 calls will be made to `shouldPrintMessage`.

```
logger.py
1 class Logger:
2     def __init__(self):
3         self.__map = dict()
4
5     def shouldPrintMessage(self, time_stamp, message):
6         if message in self.__map:
7             previous_time_stamp = self.__map[message]
8             if time_stamp >= previous_time_stamp + 10:
9                 self.__map[message] = time_stamp
10                print("True")
11            else:
12                print("False")
13        else:
14            self.__map[message] = time_stamp
15            print("True")
16
17
18 logger = Logger()
19 logger.shouldPrintMessage(1, "foo")
20 logger.shouldPrintMessage(2, "bar")
21 logger.shouldPrintMessage(3, "foo")
22 logger.shouldPrintMessage(8, "bar")
23 logger.shouldPrintMessage(10, "foo")
24 logger.shouldPrintMessage(11, "foo")

```

Run: logger

/Users/abhishek/Desktop/Python/venv/bin/python /Users/abhishek/Desktop/Python/demo_day_1/Logger/logger.py

True
True
False
False
False
True

Process finished with exit code 0