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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 <= timestamp <= 10^9
- Every timestamp will be passed in non-decreasing order (chronological order).
- 1 <= message.length <= 30
- At most 10^4 calls will be made to shouldPrintMessage.

Logger Class:

```
class Logger:
    def __init__(self):
        self.timer_list = {}

    def should_print_message(self, timestamp=None, message=None):
        # print(self.timer_list)
        if timestamp is None or message is None:
            return
        if self.timer_list.__contains__(message):
            if timestamp < self.timer_list[message]:
                return False
            else:
                self.timer_list[message] = timestamp + 10
                return True
        else:
            self.timer_list[message] = timestamp + 10
            return True
```

Driver Code:

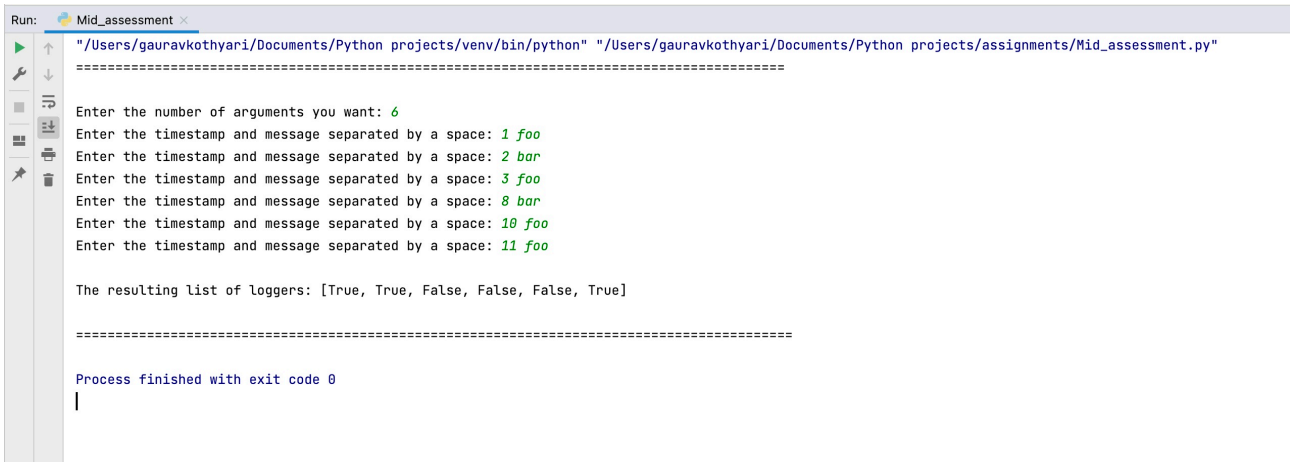
```
logger = Logger()

logger_list = []
print("=============================================================================================\n")
limits = int(input("Enter the number of arguments you want: "))

while limits:
    timestamp, message = input("Enter the timestamp and message separated by a space: ").split(" ")
    logger_list.append(logger.should_print_message(int(timestamp), message))
    limits -= 1

print(f"\nThe resulting list of loggers: {logger_list}\n")
print("=============================================================================================")
```

# Output:


Run:
Mid_assessment
"/Users/gauravkothyari/Documents/Python projects/venv/bin/python" "/Users/gauravkothyari/Documents/Python projects/assignments/Mid_assessment.py"
==========
Enter the number of arguments you want: 6
Enter the timestamp and message separated by a space: 1 foo
Enter the timestamp and message separated by a space: 2 bar
Enter the timestamp and message separated by a space: 3 foo
Enter the timestamp and message separated by a space: 8 bar
Enter the timestamp and message separated by a space: 10 foo
Enter the timestamp and message separated by a space: 11 foo
The resulting list of loggers: [True, True, False, False, False, True]
==========
Process finished with exit code 0