

Reservoir Sampling

```
1 import random
2 class Solution(object):
3     def __init__(self):
4         """
5         complete the constructor if needed.
6         """
7         self.count = 0
8         self.currsample = None
9
10    def read(self, value):
11        """
12        read a value in the stream
13        :type: value:int
14        """
15        self.count += 1
16        r = random.randint(0, self.count - 1)
17        if r == 0:
18            self.currsample = value
19
20    def sample(self):
21        """
22        return the sample of already read values
23        :rtype: int
24        """
25        return self.currsample
```