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```
1 #Arrays: Left Rotation
  def array_left_rotation(a, n, k):
2
    r = k \% n
3
4
     return a[r:] + a[:r]
  n, k = map(int, raw_input().strip().split(' '))
6
7
   a = map(int, raw_input().strip().split('
   answer = array_left_rotation(a, n, k);
8
   print ' '.join(map(str,answer))
10
   #Strings: Making Anagrams
11
   def number_needed(a, b):
12
       cTable = [0]*26
13
       for i in a:
14
           cTable[ord(i)-97] += 1
15
       for i in b:
16
           cTable[ord(i)-97] -= 1
17
18
19
       return sum([abs(i) for i in cTable])
20
   a = raw_input().strip()
21
   b = raw_input().strip()
22
23
   print number_needed(a, b)
24
   #Hash Tables: Ransom Note
25
   def ransom_note(magazine, ransom):
26
       d = \{\}
27
28
29
       for i in magazine:
           if (i not in d):
30
               d[i] = 1
31
           else:
32
33
               d[i] += 1
34
       for i in ransom:
35
           if (i not in d or d[i] == 0):
36
               return False
37
           if (i in d):
38
               d[i] -= 1
39
40
       return True
41
42
   m, n = map(int, raw_input().strip().split(' '))
   magazine = raw_input().strip().split(' ')
   ransom = raw_input().strip().split('
45
46
   answer = ransom_note(magazine, ransom)
47
   if(answer):
       print "Yes"
48
49
   else:
50
       print "No"
51
52
   #Linked Lists: Detect a Cycle
53
   def has cycle(head):
       a = head
54
       b = head
55
56
57
       while (True):
           if (a.next == None): return 0
58
59
           a = a.next
60
61
           for i in xrange(2):
62
               if (b.next != None): b = b.next
63
               else: return 0
64
```

if (a.data == b.data): return 1

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```
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  66
      #Stacks: Balanced Brackets
  67
      def is matched(expression):
  68
  69
          stack = []
  70
  71
          for i in expression:
              if i == '[':
  72
                  stack.append(']')
  73
              elif i == '(':
  74
  75
                  stack.append(')')
              elif i =='{':
  76
                  stack.append('}')
  77
              elif i in [']', '}', ')']:
  78
                  if len(stack) == 0 or stack.pop() != i: return False
  79
          return len(stack) == 0
  80
  81
  82
  83
     t = int(raw_input().strip())
  84
      for a0 in xrange(t):
  85
          expression = raw_input().strip()
  86
          if is_matched(expression) == True:
  87
  88
              print "YES"
  89
          else:
              print "NO"
  90
  91
  92
      #Queues: A Tale of Two Stacks
  93
      class MyQueue(object):
  94
          def __init__(self):
  95
              self.labels = ['first', 'second']
  96
              self.cur = 0
  97
              self.first = []
  98
              self.second = []
  99
  100
          def peek(self):
  101
              if (not len(self.first) and not len(self.second)): return
  102
  103
              if (not len(self.second)):
  104
                  while (len(self.first) > 0):
  105
                       self.second.append(self.first.pop())
  106
  107
              res = self.second[-1]
  108
  109
              return res
  110
  111
          def pop(self):
  112
              if (not len(self.first) and not len(self.second)): return
  113
  114
  115
              if (not len(self.second)):
  116
                  while (len(self.first) > 0):
  117
                       self.second.append(self.first.pop())
  118
              res = self.second.pop()
  119
  120
              return res
  121
  122
          def put(self, value):
  123
              self.first.append(value)
  124
  125
```

```
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 131
 132
     queue = MyQueue()
     t = int(raw_input())
 133
 134
     for line in xrange(t):
 135
         values = map(int, raw_input().split())
 136
         if values[0] == 1:
 137
              queue.put(values[1])
 138
         elif values[0] == 2:
 139
```

if ((low == None or node.data > low) and (high == None or node.data < high)):</pre>

left = True if node.left == None else traverse(node.left, low, node.data)
right = True if node.right == None else traverse(node.right, node.data, high)

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141

142 143 144

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queue.pop()

print queue.peek()

#Trees: Is this a binary search tree?

def check_binary_search_tree_(root):

def traverse(node, low, high):

return left and right

return traverse(root, None, None)

visited, queue = set(), [start]

vertex = queue.pop(0)

if vertex not in visited:

visited.add(vertex)

queue.extend(graph[vertex] - visited)

else: return False

def bfs(graph, start):

while queue:

return visited

else: