

```

1  N = 5
2
3  class Dvector(object):
4      def __init__(self, head_idx: int, last_idx: int):
5          self.head_idx = head_idx
6          self.last_idx = last_idx
7          self.vector = [0] * (last_idx - head_idx + 1)
8
9      def __repr__(self):
10         return str(self.vector)
11
12     def __iter__(self):
13         return iter(self.vector)
14
15     def __getitem__(self, key: int):
16         if not(self.head_idx <= key <= self.last_idx):
17             raise IndexError("Index out of range")
18         return self.vector[key - self.head_idx]
19
20     def __setitem__(self, key: int, value):
21         if not(self.head_idx <= key <= self.last_idx):
22             raise IndexError("Index out of range")
23         self.vector[key - self.head_idx] = value
24
25     # オブジェクトの値渡しで使用
26     def copy(self):
27         cpy = Dvector(self.head_idx, self.last_idx)
28         cpy.vector = self.vector.copy()
29         return cpy
30
31
32 def main():
33     global N
34     a = Dvector(1, N) # 配列 a の添字は 1~N
35     b = Dvector(2, N+1) # 配列 b の添字は 2~N+1
36
37     for i in range(1, N+1):
38         a[i] = i / 20.0
39         print(f"a[{i}] = {a[i]}")
40
41     for i in range(2, N+2):
42         b[i] = i / 20.0
43         print(f"b[{i}] = {b[i]}")
44
45
46 if __name__ == "__main__":
47     main()

```