```
public class CAList<E> implements List<E> {
  E[] contents;
  int size;
  int start;

  @SuppressWarnings("unchecked")
  public CAList(int capacity) {
    this.contents = (E[])(new Object[capacity]);
    this.size = 0;
    this.start = 0;
  }

  private int indexFor(int index) {
    int ans = (this.start + index) % this.contents.length;
    System.out.println("Index for " + index + " is " + ans);
    return ans;
  }

  @SuppressWarnings("unchecked")
  private void expandCapacity() {
    int currentCapacity = this.contents.length;
    if(this.size < currentCapacity) { return; }









  }

  public E get(int index) {
    // ASSUME index is in bounds
    int toLookup = this.indexFor(index);
    return this.contents[toLookup];
  }

  public void prepend(E value) {
    expandCapacity();
    this.size += 1;
    this.start -= 1;
    if (this.start == -1) {
      this.start = this.contents.length - 1;
    }
    this.contents[this.start] = value;
  }

  public void add(E value) {
    expandCapacity();
    this.contents[this.indexFor(this.size)] = value;
    this.size += 1;
  }

  public String toString() {
    return java.util.Arrays.deepToString(this.contents);
  }

  public int size() {
    return this.size;
  }
```

```
  public static void main(String[] args) {
    CAList<Integer> a = new CAList<>(30);
    System.out.println(a);
    a.prepend(30);
    System.out.println(a);
    a.add(40);
    System.out.println(a);
    a.prepend(20);
    System.out.println(a);
    a.add(70);
    System.out.println(a);
  }
}
```