

```

1  enum Error_code{underflow, overflow, range_error_new, success, fail, not_present};
2  const int max_list = 30;
3
4  template <class List_entry>
5  class List {
6  public:
7      // methods of theList ADT
8      List( );
9      int size( ) const;
10     bool full( ) const;
11     bool empty( ) const;
12     void clear( );
13     void traverse(void (*visit)(List_entry &));
14     Error_code retrieve(int position, List_entry &x) const;
15     Error_code replace(int position, const List_entry &x);
16     Error_code remove(int position, List_entry &x);
17     Error_code insert(int position, const List_entry &x);
18 protected:
19     // data members for a contiguous list implementation
20     int count;
21     List_entry entry[max_list];
22 }

```