Overview of STL Adapters
STL Adapters

- STL adapters implement the *Adapter* design pattern
- i.e., they convert one interface into another interface clients expect

See en.wikipedia.org/wiki/Adapter_pattern
STL Adapters

• There are three main types of adapters in STL
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  • Iterator adapters
    • e.g., `back_inserter()`, `front_inserter()`, `inserter()`, `reverse_iterator`, `istream_iterator`, & `ostream_iterator`
STL Adapters

- There are three main types of adapters in STL
  - Iterator adapters
  - Container adapters
    - e.g., stack, queue, & priority_queue

<table>
<thead>
<tr>
<th>Category</th>
<th>Containers</th>
<th>Characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adapter</td>
<td>stack</td>
<td>First in, last out data structure.</td>
</tr>
<tr>
<td></td>
<td>queue</td>
<td>First in, first out data structure.</td>
</tr>
<tr>
<td></td>
<td>priority_queue</td>
<td>Queue that maintains items in a sorted order based on a priority value.</td>
</tr>
</tbody>
</table>

These adapters narrow existing interfaces, e.g., a stack adapter for deque.
There are three main types of adapters in STL:

- Iterator adapters
- Container adapters
- Function adapter
  - e.g., negators, binders, etc.

DUCT TAPE
If you can't fix it with duct tape, you're not using enough duct tape.