

removeMin - heapifyDown

```
1  template <class T>
2  T Heap<T>::_removeMin() {
3      // Swap with the last value
4      T minValue = item_[1];
5      item_[1] = item_[size_];
6      size--;
7
8      // Restore the heap property
9      _heapifyDown(1);
10
11     // Return the minimum value
12     return minValue;
13 }
```

```
1  template <class T>
2  void Heap<T>::_heapifyDown(size_t index = 1) {
3      if ( !_isLeaf(index) ) {
4          size_t minChildIndex = _minChild(index);
5          if ( item_[index] > item_[minChildIndex] ) {
6              std::swap( item_[index], item_[minChildIndex] );
7              _heapifyDown( minChildIndex );
8          }
9      }
10 }
```