1. Which STL container is used to implement Last-In-First-Out (LIFO) behavior?
   1. vector
   2. **stack**
   3. list
   4. queue
2. Which STL container is used to implement First-In-First-Out (FIFO) behavior?
   1. vector
   2. stack
   3. list
   4. **queue**
3. What is the time complexity of the push() operation in the stack container?
   1. **O(1)**
   2. O(n)
   3. O(log n)
   4. O(n log n)
4. What is the time complexity of the pop() operation in the stack container?
   1. **O(1)**
   2. O(n)
   3. O(log n)
   4. O(n log n)
5. Which function is used to access the top element of a stack in C++ STL?
   1. **top()**
   2. front()
   3. back()
   4. get()
6. Which function is used to add an element to the back of a queue in C++ STL?
   1. **push()**
   2. enqueue()
   3. insert()
   4. add()
7. What is the time complexity of the push() operation in the queue container?
   1. **O(1)**
   2. O(n)
   3. O(log n)
   4. O(n log n)
8. What is the time complexity of the pop() operation in the queue container?
   1. O(1)
   2. O(n)
   3. O(log n)
   4. O(n log n)
9. Answer: a) O(1)
10. Which function is used to access the front element of a queue in C++ STL?
    1. top()
    2. **front()**
    3. back()
    4. get()
11. Which STL container is used to implement a priority queue?
    1. vector
    2. stack
    3. queue
    4. **priority\_queue**
12. What is the default underlying container used in the priority\_queue in C++ STL?
    1. **vector**
    2. stack
    3. queue
    4. list
13. Which function is used to add an element to a priority queue in C++ STL?
    1. add()
    2. insert()
    3. **push()**
    4. enqueue()
14. What is the time complexity of the push() operation in the priority\_queue container?
    1. O(1)
    2. O(n)
    3. **O(log n)**
    4. O(n log n)
15. What is the time complexity of the pop() operation in the priority\_queue container?
    1. O(1)
    2. O(n)
    3. **O(log n)**
    4. O(n log n)
16. How can you create a max heap using the priority\_queue in C++ STL?
    1. **Use the default priority\_queue container.**
    2. Use priority\_queue with a custom comparison function.
    3. Use priority\_queue with a custom underlying container.
    4. Use priority\_queue with a custom allocator.
17. How can you create a min heap using the priority\_queue in C++ STL?
    1. Use the default priority\_queue container.
    2. **Use priority\_queue with a custom comparison function.**
    3. Use priority\_queue with a custom underlying container.
    4. Use priority\_queue with a custom allocator.
18. Which algorithm is used to sort elements in a stack in C++ STL?
    1. sort()
    2. reverse()
    3. rotate()
    4. **There is no built-in algorithm for sorting elements in a stack.**
19. Which algorithm is used to reverse elements in a stack in C++ STL?
    1. sort()
    2. **reverse()**
    3. rotate()
    4. There is no built-in algorithm for reversing elements in a stack.
20. Which algorithm is used to reverse elements in a queue in C++ STL?
    1. sort()
    2. **reverse()**
    3. rotate()
    4. There is no built-in algorithm for reversing elements in a queue.
21. How can you check if a stack is empty in C++ STL?
    1. stack.isEmpty()
    2. **stack.empty()**
    3. stack.is\_empty()
    4. stack.size() == 0
22. How can you check if a priority queue is empty in C++ STL?
    1. pq.isEmpty()
    2. **pq.empty()**
    3. pq.is\_empty()
    4. pq.size() == 0
23. How can you get the number of elements in a stack in C++ STL?
    1. stack.length()
    2. **stack.size()**
    3. stack.count()
    4. stack.get\_size()
24. How can you get the number of elements in a queue in C++ STL?
    1. queue.length()
    2. **queue.size()**
    3. queue.count()
    4. queue.get\_size()
25. How can you get the number of elements in a priority queue in C++ STL?
    1. pq.length()
    2. **pq.size()**
    3. pq.count()
    4. pq.get\_size()
26. Which of the following containers use the concept of "adaptors" in C++ STL?
    1. vector, deque, and list
    2. **stack, queue, and priority\_queue**
    3. map and set
    4. all of the above
27. Which of the following is true for the stack container in C++ STL?
    1. It is a dynamic array with constant size.
    2. It allows duplicate elements.
    3. **It is a last-in-first-out (LIFO) container.**
    4. It is a sorted container.
28. Which of the following is true for the queue container in C++ STL?
    1. It is a dynamic array with constant size.
    2. It allows duplicate elements.
    3. **It is a first-in-first-out (FIFO) container.**
    4. It is a sorted container.
29. Which of the following is true for the priority\_queue container in C++ STL?
    1. It is a dynamic array with constant size.
    2. It allows duplicate elements.
    3. **It is a sorted container in ascending order by default.**
    4. It is a first-in-first-out (FIFO) container.
30. Entries in a stack are “ordered”. What is the meaning of this statement?
    1. A collection of stacks is sortable
    2. Stack entries may be compared with the ‘<‘ operation
    3. The entries are stored in a linked list
    4. **There is a Sequential entry that is one by one**
31. If the elements “A”, “B”, “C” and “D” are placed in a stack and are deleted one at a time, what is the order of removal?
32. ABCD
33. **DCBA**
34. DCAB
35. ABDC