### Part A: Questions 17-24

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### Part C: Question 3 & 4:

```cpp
#include <set>
#include <string>

struct Node {
    User * user_; 
    Node * next_; 
    std::set<User*> edges_; 
    Node(User*u, Node*next=nullptr) : user_(u), next_(next){} 
    ~Node() { delete next_; }
};

class Graph {
    Node * root_; 
    public:
    Graph() : root_(nullptr) {} 
    ~Graph(); 
    Graph( const Graph& ); 
    Graph ( Graph&& );
    Graph & operator=( Graph && );
    ...
};
```
Vector Reference

**Iterators:**
- `begin` Return iterator to beginning (public member function)
- `end` Return iterator to end (public member function)

**Capacity:**
- `size` Return size (public member function)

**Element access:**
- `operator[]` Access element (public member function)
- `at` Access element (public member function)
- `front` Access first element (public member function)
- `back` Access last element (public member function)
- `data` Access data (public member function)

**Modifiers:**
- `assign` Assign vector content (public member function)
- `push_back` Add element at the end (public member function)
- `pop_back` Delete last element (public member function)
- `insert` Insert elements (public member function)
- `erase` Erase elements (public member function)
- `swap` Swap content (public member function)
- `clear` Clear content (public member function)

```cpp
// erasing from vector
#include <iostream>
#include <vector>

int main ()
{
    std::vector<int> myvector;

    // set some values (from 1 to 10)
    for (int i=1; i<=10; i++) myvector.push_back(i);

    // erase the 6th element
    myvector.erase (myvector.begin()+5);

    // erase the first 3 elements:
    myvector.erase (myvector.begin(),myvector.begin()+3);

    std::cout << "myvector contains:");
    for (unsigned i=0; i<myvector.size(); ++i)
        std::cout << "," << myvector[i];
    std::cout << 

    return 0;
}
```