

Description

1. How to make cin faster?

```
std::ios_base::sync_with_stdio(false);
```

2. An example of using <vector>

```
#include <iostream>

#include <vector>

#include <algorithm> // sort

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

    int x;

    while (std::cin>>x) {
        V.push_back(x);
    }

    for (auto t : V) std::cout<<" "<< t;

    std::cout << "\n";

    std::sort(V.begin(), V.end());

    for (auto t : V) std::cout<<" "<< t;

    std::cout << "\n";
}
```

3. An example of using <queue>

```
#include <iostream>

#include <algorithm>

#include <queue>

#include <string>
```

```

// Queueing

using namespace std;

int main()
{
    string s;
    queue<string> q;
    while (cin >> s) {
        if (s=="Push") {
            cin >> s;
            q.push(s);
        }
        else if (s=="Pop") {
            if (q.size()>0)
                q.pop();
        }
        else if (s=="Front") {
            if (q.size()==0)
                cout << "empty\n";
            else
                cout<<q.front()<<"\n";
        }
    }
}

```

4. An example of using <stringstream>

```

#include <string>
#include <iostream>
#include <sstream> // std::stringstream
int main () {

```

```
std::stringstream ss;
ss << "Hello " << 123;
std::string s = ss.str();
std::cout << s << '\n';
}
```

5. An example of using <set>

```
#include <iostream>
#include <set>
int main()
{
    std::set<int> S = {1, 2, 3, 4};
    auto search = S.find(2);
    if(search != S.end()) {
        std::cout << (*search) << '\n';
    }
    else {
        std::cout << "Not found\n";
    }
}
```

6. An example of using <stack>

```
#include <stack>
#include <iostream>
int main()
{
    std::stack<int> s;
    s.push( 3 ); s.push( 6 );
    s.push( 18 );
    std::cout<<s.size()<<" elements\n";
    std::cout<<"Top: "<< s.top()<< "\n";
    s.pop();
    std::cout<<s.size()<<" elements\n";
}
```

7. An example of getline()

```
#include <string>
#include <iostream>
```

```
int main()
{
    std::string name;
    std::cout << "What is your name? ";
    std::getline(std::cin, name);
    std::cout << "Hello " << name << "\n";
}
```

8. An example of using <map>

```
#include <iostream>
#include <string>
#include <map>
#include <utility> // make_pair
int main()
{
    std::map<std::string, int> ID;
    ID.insert(std::make_pair("Tom", 123));
    std::cout << ID["Tom"] << "\n";
}
```

Input

Output

Sample Input

EOF

Sample Output

EOF