

$$= h(n) [\cos(2\pi f_{ce} n) + j \sin(2\pi f_{ce} n) + \cos(2\pi f_{ce} n) - j \sin(2\pi f_{ce} n)]$$

$$= h(n) \cdot 2 \cos(2\pi f_{ce} n)$$

{◇}

10 - 12 - 2024

POO

Course

STL : Standard Template

Library

STL {
 vectors ((Vector))
 Maps ((Map))
 Lists ((List))
 Piles ((Stack))

Vector : Example:

```
#include <vector>
using namespace std;
int main () {
```

```
vector<int> V;
```

```
V.push_back(10); // V = [10]
```

```
V.push_back(20); // V = [10, 20]
```

```
V.push_back(30); // V = [10, 20, 30]
```

```
for (int i:V) {
```

```
    cout << i << " ";
```

```
}
```

```
cout << endl;
```

```
V.pop_back(); // V = [10, 20] → 30
```

```
}
```

Functions :

→ push_back (Value);

→ pop_back ();

→ size ();

→ clear();

Map: Example: 1

```
#include <map>
using namespace std;
```

```
int main() {
```

```
    map<string, int> age;
```

```
    age["Alice"] = 2;
```

```
    age["Mohamed"] = 20;
```



```
    cout << "Age de Mohamed est: " << age["Mohamed"] << endl; // 20
```

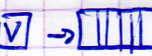
```
}
```

fonctions:

- insert({clé, valeur});
- erase(clé)
- find(clé)
- size();

List: définition: List<int> l;

fonctions: push-back(V);  → 

push-front(V);  → 