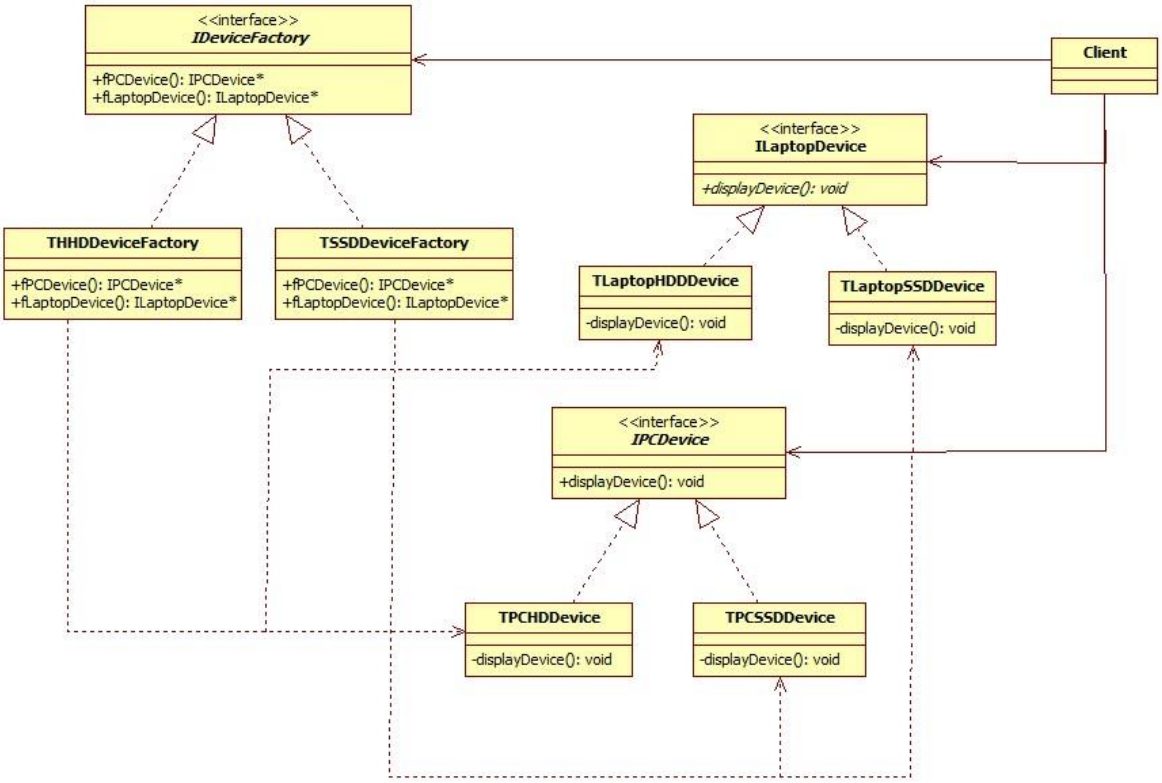
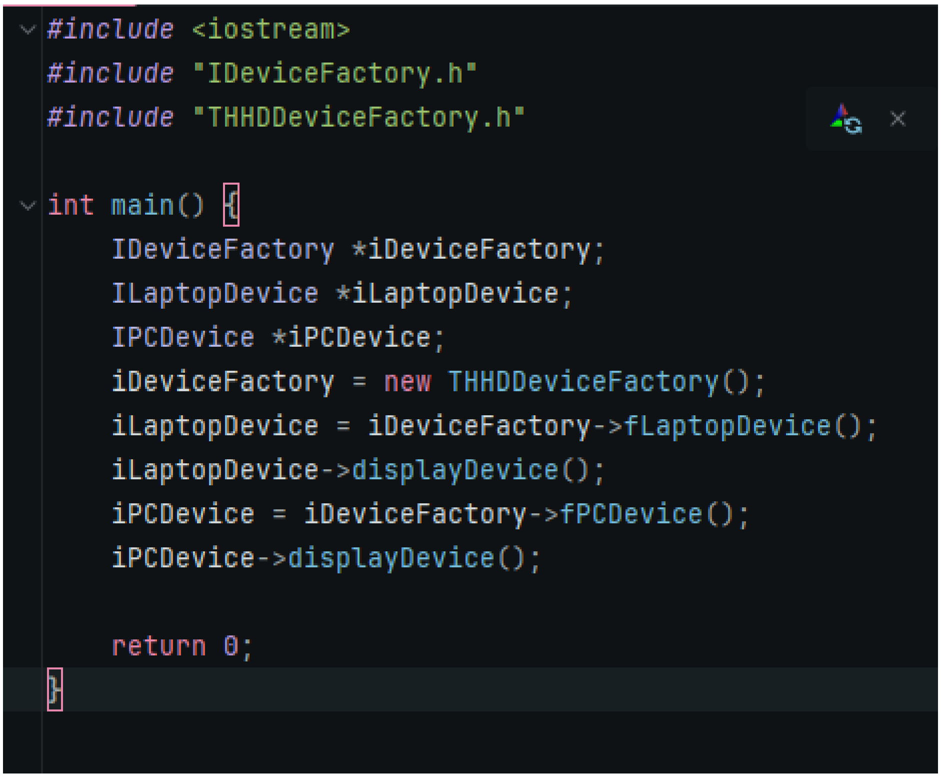
Natalia Florek

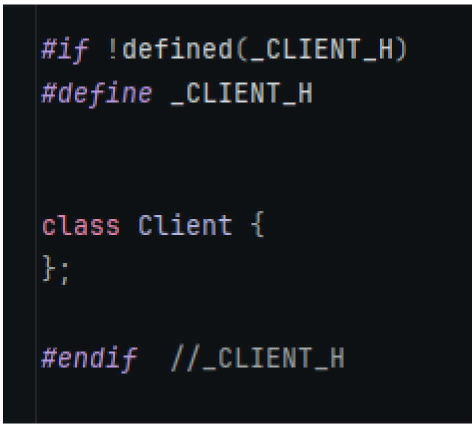
Diagram klas



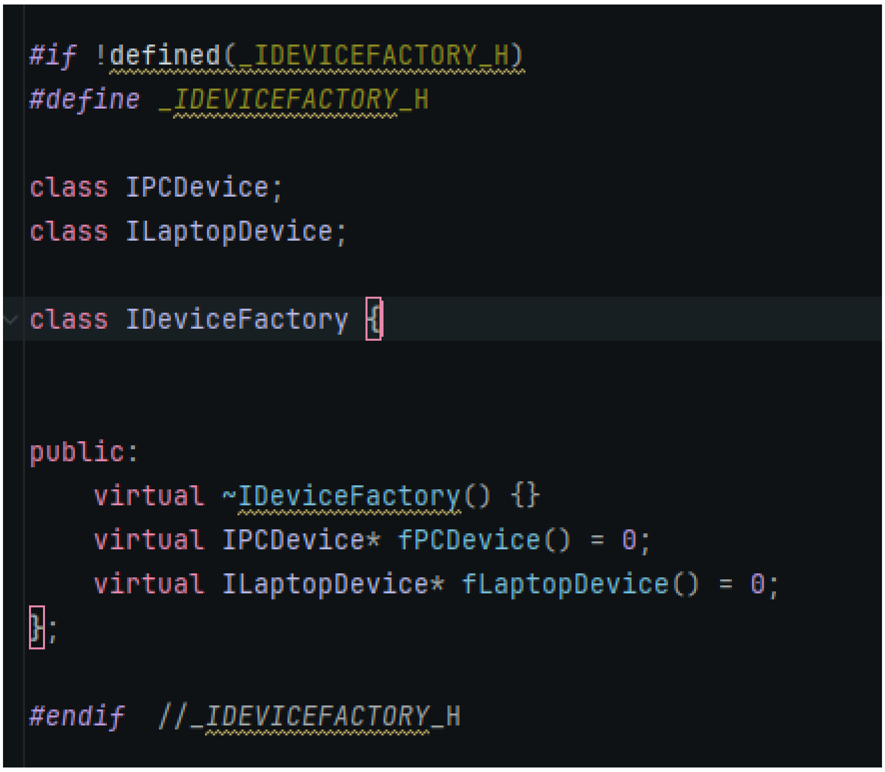
Kod



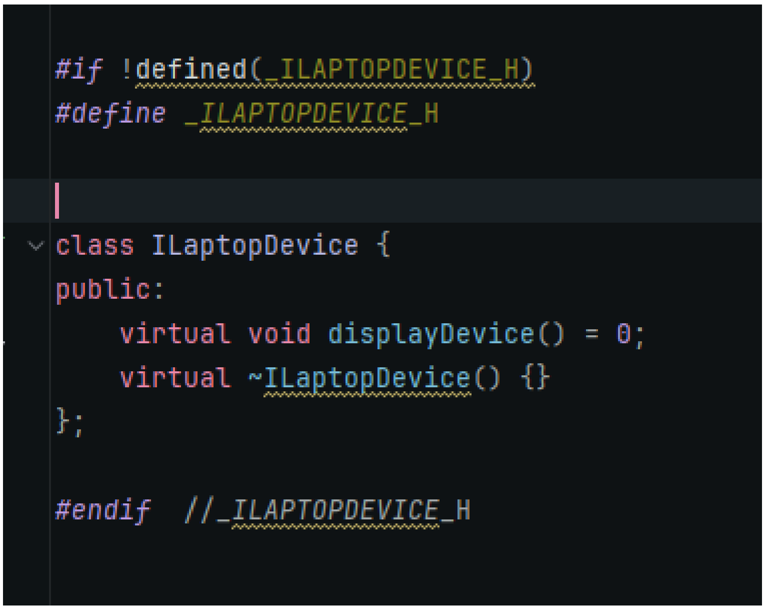
```
#include <iostream>
#include "IDeviceFactory.h"
#include "THHDDeviceFactory.h"

int main() {
    IDeviceFactory *iDeviceFactory;
    ILaptopDevice *iLaptopDevice;
    IPCDevice *iPCDevice;
    iDeviceFactory = new THHDDeviceFactory();
    iLaptopDevice = iDeviceFactory->fLaptopDevice();
    iLaptopDevice->displayDevice();
    iPCDevice = iDeviceFactory->fPCDevice();
    iPCDevice->displayDevice();

    return 0;
}
```



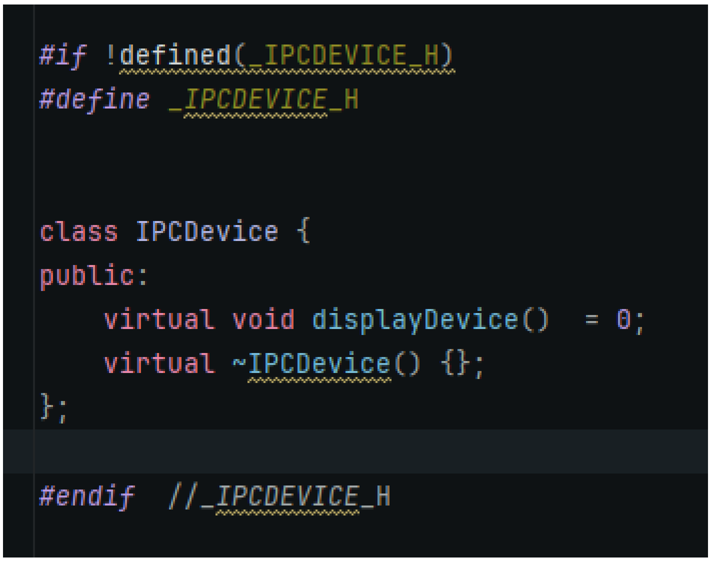
```
#if !defined(_CLIENT_H)
#define _CLIENT_H


class Client {
};

#endif  //_CLIENT_H
```



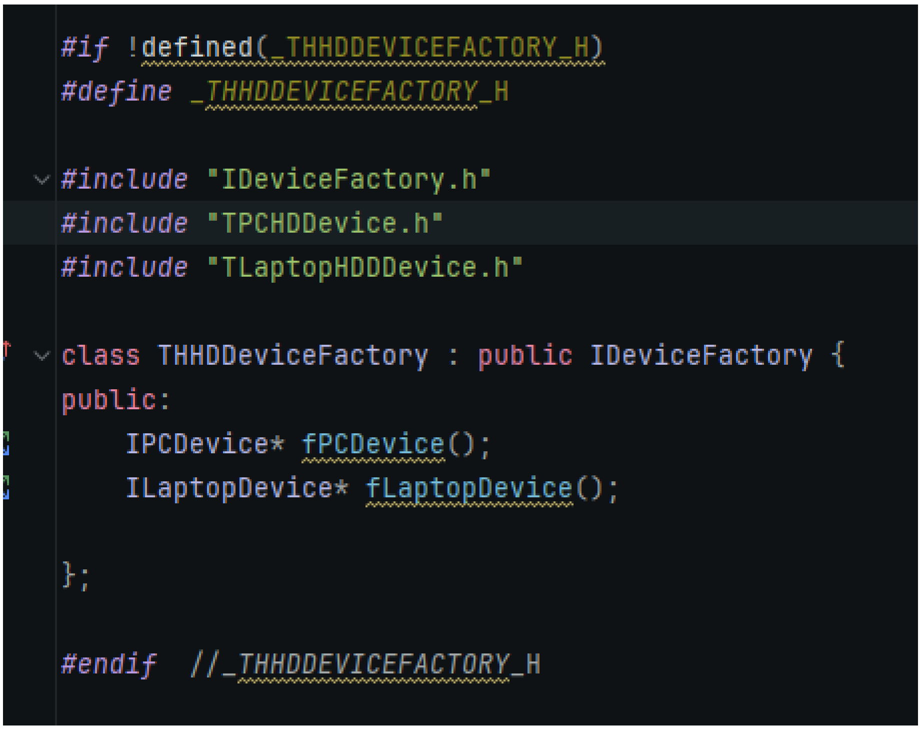
```
#if !defined(_IDEVICEFACTORY_H)
#define _IDEVICEFACTORY_H

class IPCDevice;
class ILaptopDevice;

class IDeviceFactory {


public:
    virtual ~IDeviceFactory() {}
    virtual IPCDevice* fPCDevice() = 0;
    virtual ILaptopDevice* fLaptopDevice() = 0;
};

#endif  //_IDEVICEFACTORY_H
```



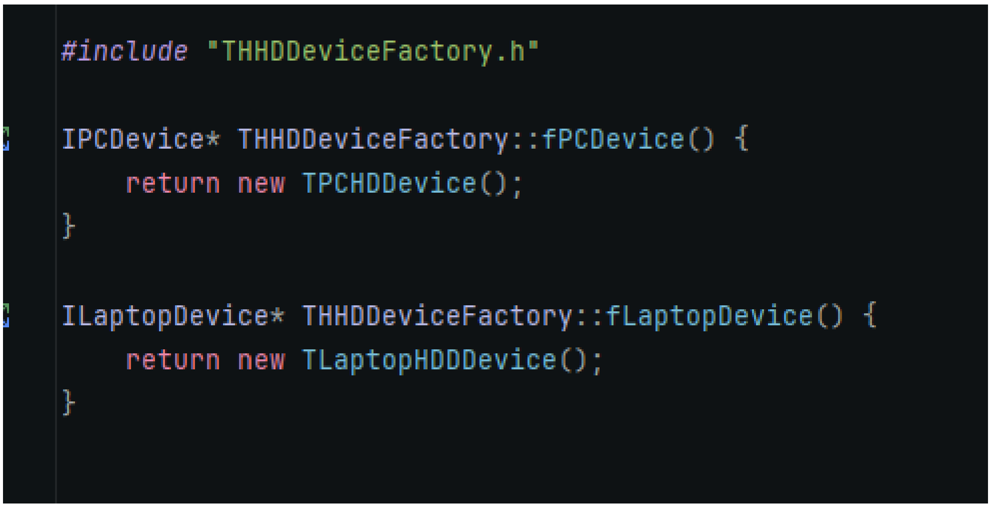
```
#if !defined(_ILAPTOPDEVICE_H)
#define _ILAPTOPDEVICE_H


class ILaptopDevice {
public:
    virtual void displayDevice() = 0;
    virtual ~ILaptopDevice() {}
};

#endif  //_ILAPTOPDEVICE_H
```



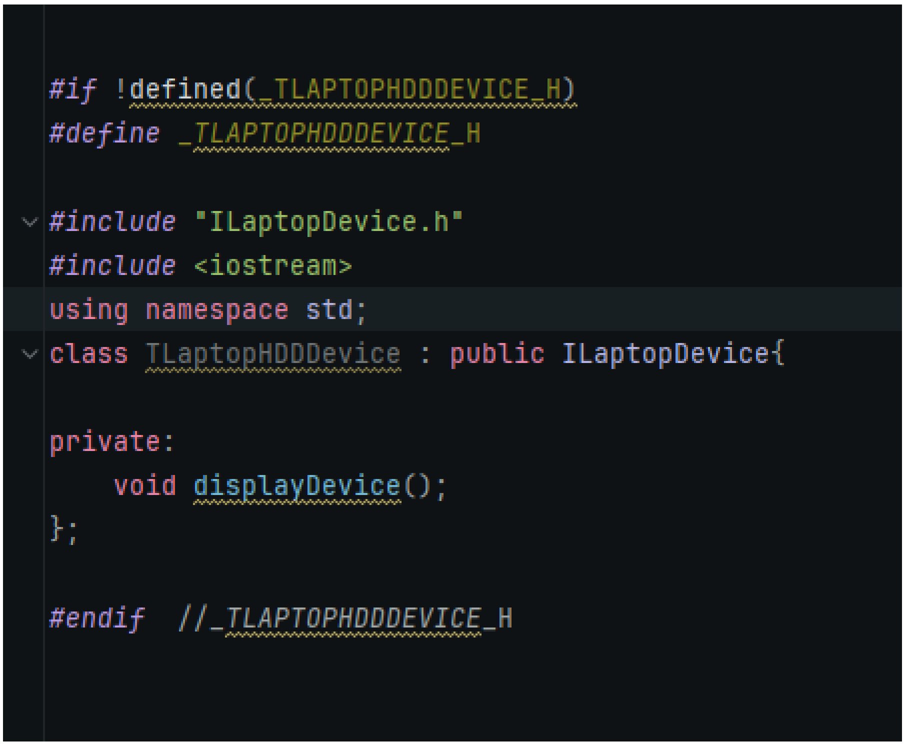
```cpp
#if !defined(_IPCDEVICE_H)
#define _IPCDEVICE_H


class IPCDevice {
public:
    virtual void displayDevice()  = 0;
    virtual ~IPCDevice() {};
};

#endif  //_IPCDEVICE_H
```



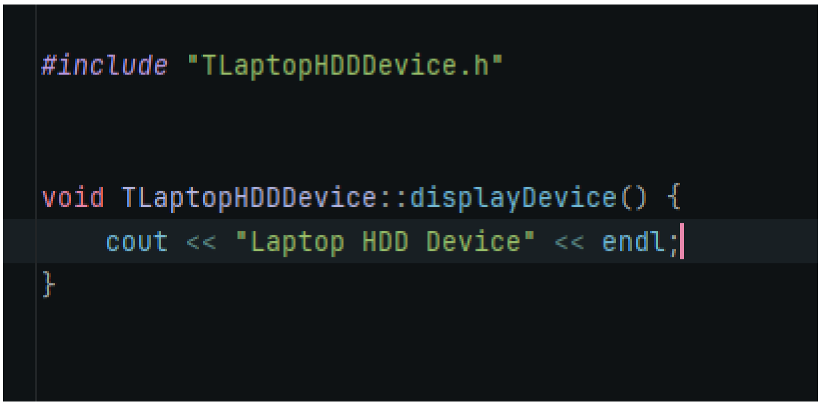
```cpp
#if !defined(_THHDDEVICEFACTORY_H)
#define _THHDDEVICEFACTORY_H

#include "IDeviceFactory.h"
#include "TPCHDDevice.h"
#include "TLaptopHDDDevice.h"

class THHDDeviceFactory : public IDeviceFactory {
public:
    IPCDevice* fPCDevice();
    ILaptopDevice* fLaptopDevice();

};

#endif  //_THHDDEVICEFACTORY_H
```



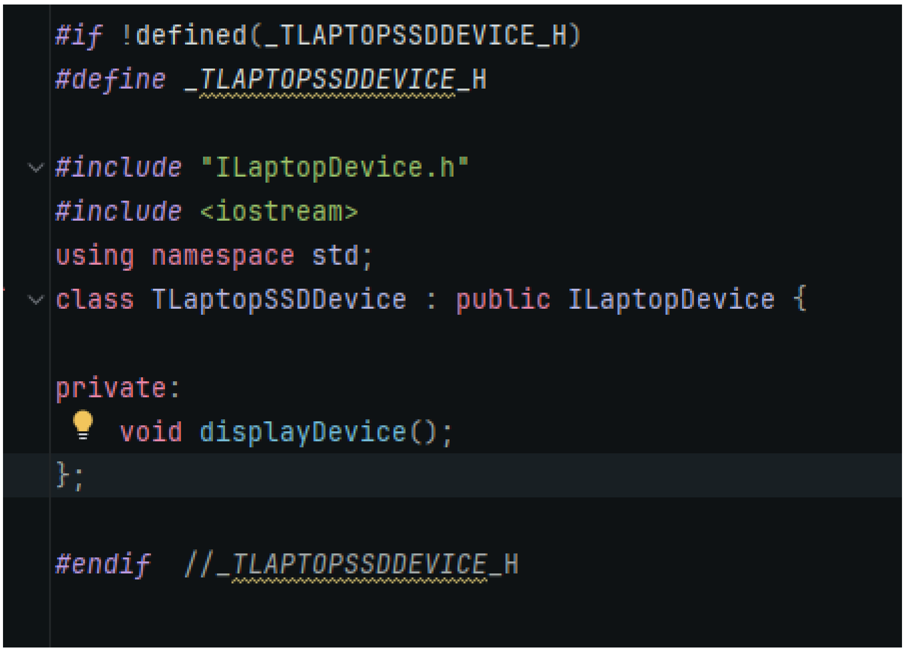
```cpp
#include "THHDDeviceFactory.h"

IPCDevice* THHDDeviceFactory::fPCDevice() {
    return new TPCHDDevice();
}

ILaptopDevice* THHDDeviceFactory::fLaptopDevice() {
    return new TLaptopHDDDevice();
}
```



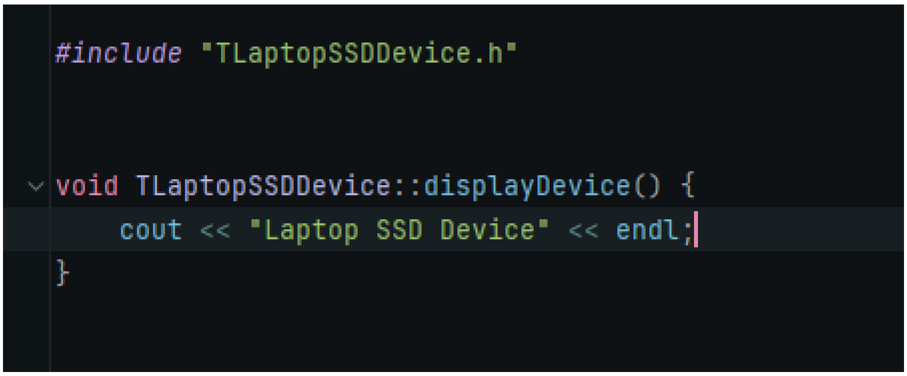
```
#if !defined(_TLAPTOPHDDDEVICE_H)
#define _TLAPTOPHDDDEVICE_H

#include "ILaptopDevice.h"
#include <iostream>
using namespace std;
class TLaptopHDDDevice : public ILaptopDevice{

private:
    void displayDevice();
};

#endif  //_TLAPTOPHDDDEVICE_H
```



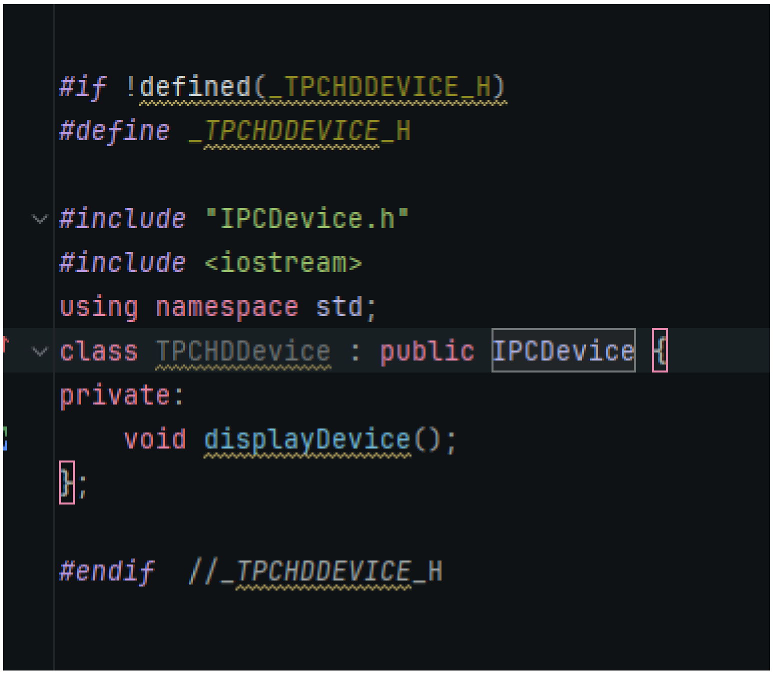
```
#include "TLaptopHDDDevice.h"


void TLaptopHDDDevice::displayDevice() {
    cout << "Laptop HDD Device" << endl;
}
```



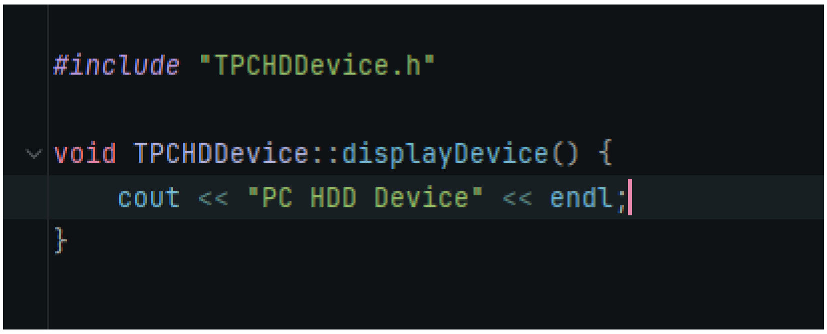
```
#if !defined(_TLAPTOPSSDDEVICE_H)
#define _TLAPTOPSSDDEVICE_H

#include "ILaptopDevice.h"
#include <iostream>
using namespace std;
class TLaptopSSDDevice : public ILaptopDevice {

private:
    void displayDevice();
};

#endif  //_TLAPTOPSSDDEVICE_H
```



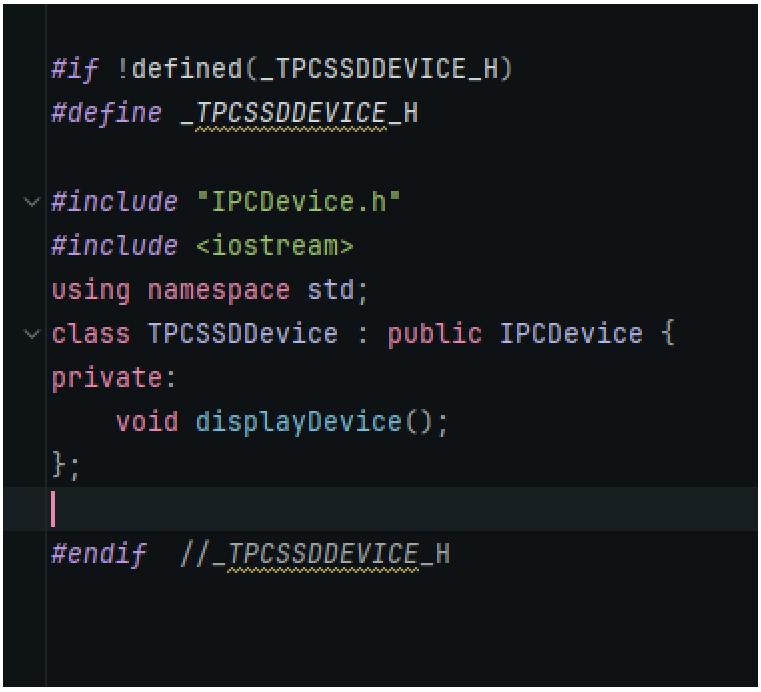
```
#include "TLaptopSSDDevice.h"


void TLaptopSSDDevice::displayDevice() {
    cout << "Laptop SSD Device" << endl;
}
```



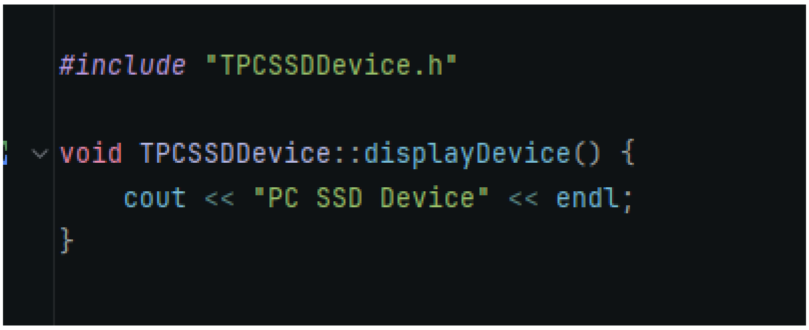
```
#if !defined(_TPCHDDEVICE_H)
#define _TPCHDDEVICE_H

#include "IPCDevice.h"
#include <iostream>
using namespace std;
class TPCHDDevice : public IPCDevice {
private:
    void displayDevice();
};

#endif  //_TPCHDDEVICE_H
```



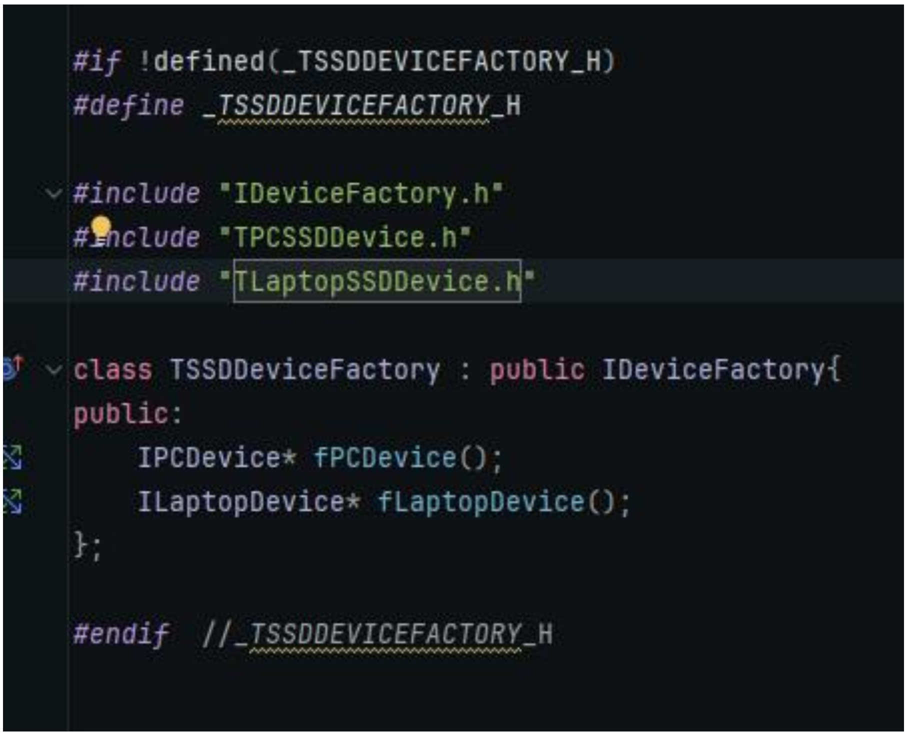
```
#include "TPCHDDevice.h"

void TPCHDDevice::displayDevice() {
    cout << "PC HDD Device" << endl;
}
```



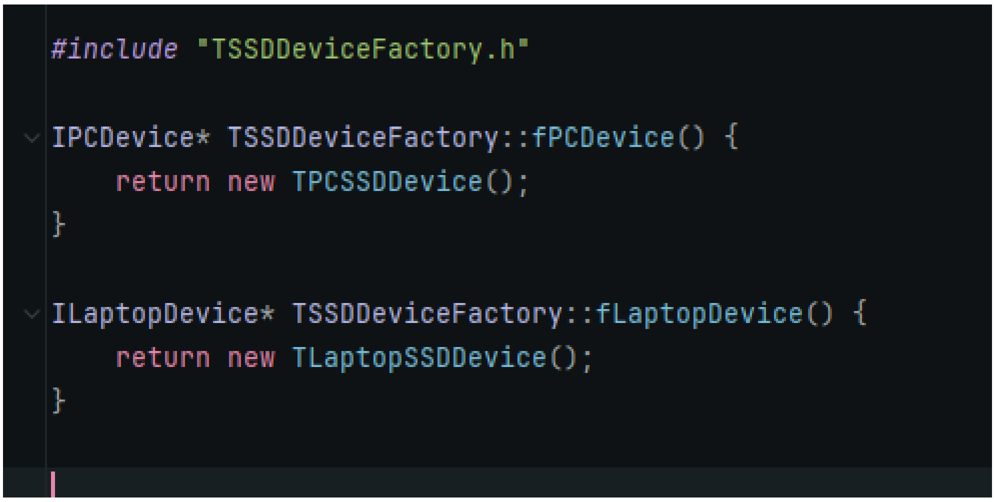
```cpp
#if !defined(_TPCSSDDEVICE_H)
#define _TPCSSDDEVICE_H

#include "IPCDevice.h"
#include <iostream>
using namespace std;
class TPCSSDDevice : public IPCDevice {
private:
    void displayDevice();
};

#endif  //_TPCSSDDEVICE_H
```



```cpp
#include "TPCSSDDevice.h"

void TPCSSDDevice::displayDevice() {
    cout << "PC SSD Device" << endl;
}
```

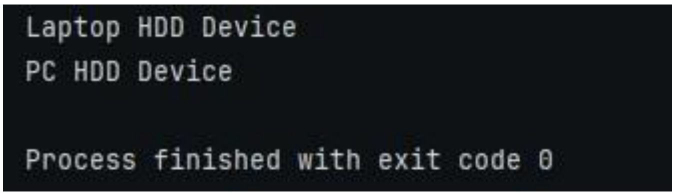


```cpp
#if !defined(_TSSDDEVICEFACTORY_H)
#define _TSSDDEVICEFACTORY_H

#include "IDeviceFactory.h"
#include "TPCSSDDevice.h"
#include "TLaptopSSDDevice.h"

class TSSDDeviceFactory : public IDeviceFactory{
public:
    IPCDevice* fPCDevice();
    ILaptopDevice* fLaptopDevice();
};

#endif  //_TSSDDEVICEFACTORY_H
```



```cpp
#include "TSSDDeviceFactory.h"

IPCDevice* TSSDDeviceFactory::fPCDevice() {
    return new TPCSSDDevice();
}

ILaptopDevice* TSSDDeviceFactory::fLaptopDevice() {
    return new TLaptopSSDDevice();
}

```

Output



```
Laptop HDD Device
PC HDD Device

Process finished with exit code 0
```