

```
/*
 * Error.cpp
 *
 * Created on: Dec 28, 2009
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 */

#include "Error.h"

namespace GF
{
    Error::Error(int m)
    {
        message = m;
    }

    Error::~Error()
    {
        // TODO Auto-generated destructor stub
    }

    void Error::Out(std::ostream& o) const
    {
        switch (message)
        {
            {
            case 0:
            {
                o << "GF characteristic is not a prime number";
                break;
            }
            case 1:
            {
                o << "GF characteristic is not a prime power";
                break;
            }
            case 2:
            {
                o << "Polynomial is not irreducible";
                break;
            }
            case 8:
            {
                o << "Division by zero";
                break;
            }
            case 9:
            {
                o << "Power must be a polynomial of degree zero";
                break;
            }
            default:
                o << "Unknown error";
                break;
            }
        }
    }

    std::ostream& operator <<(std::ostream& o, const Error& e)

```

```
{  
    e.Out(o);  
  
    return o;  
}
```

```
const int Error::BASE_NOT_PRIME = 0;  
const int Error::BASE_NOT_PRIME_POWER = 1;  
const int Error::POLYNOMIAL_NOT_IRREDUCIBLE = 2;  
const int Error::DIVISION_BY_ZERO = 8;  
const int Error::ORDER_NOT_ZERO = 9;  
const int Error::ORDER_LESS_THAN_ZERO = 7;  
const int Error::NEGATIVE_ORDER_OF_COEFICIENT = 6;
```

```
}
```