代码设计

1. 实用类设计

- 获取系统时间

```
class Date
        {
        public:
            static size_t now()
            {
                return (size_t)time(nullptr);
            }
        };
```

- 判断文件是否存在
- 创建文件的所在目录路径
- 创建目录

```
class File
        {
        public:
            static bool exists(const std::string &pathname)
            {
                struct stat st;
                return stat(pathname.c_str(), &st) == 0;
            }
            static std::string path(const std::string &pathname)
            {
                size_t pos = pathname.find_last_of("/\\");
                if (pos == std::string::npos)
                    return ".";
                return pathname.substr(0, pos - 1);
            }
            static void createDirectory(const std::string &pathname)
            {
                size_t pos = 0;
                size_t idx = 0;
                while (idx < pathname.size())
                {
                    pos = pathname.find_first_of("/\\", idx);
                    if (pos == std::string::npos)
                    {
                        mkdir(pathname.c_str(), 0777);
                        return ;
                    }
                    std::string parent_dir = pathname.substr(0, pos + 1);
                    if (exists(parent_dir))
                    {
                        idx = pos + 1;
                        continue;
                    }
                        mkdir(parent_dir.c_str(), 0777);
                        idx = pos + 1;
                }
            }
```

```
38          };
```