**2023 12 15**

**Dosya İşlemleri**

std**::**ifstream open\_binary\_file**(const** std**::**string**&** filename**)**

**{**

std**::**ifstream ifs **{**filename**,** std**::**ios**::**binary**};**

**if** **(!**ifs**)**

**{**

**throw** std**::**runtime\_error**{** filename **+** " dosyayisi acilamiyor\n"**};**

**}**

**return** ifs**;**

**}**

**int** main**()**

**{**

**using** **namespace** std**;**

**constexpr** **size\_t** n **=** 10'000u**;**

**int** x**{};**

**int** prime\_count**{};**

**auto** ofs **=** create\_binary\_file**(**"primes10000.dat"**);**

**while** **(**prime\_count **<** n**)**

**{**

**if** **(**isprime**(**x**))**

**{**

ofs**.**write**(reinterpret\_cast<char\*>(&**x**),** **sizeof(int));**

**++**prime\_count**;**

**}**

**++**x**;**

**}**

ofs**.**close**();**

**}**

**int** main**()**

**{**

**auto** ifs **=** open\_binary\_file**(**"primes10000.dat"**);**

**int** x**{};**

**while** **(**ifs**.**read**(reinterpret\_cast<char\*>(&**x**),** **sizeof(**x**)))**

**{**

cout **<<** x **<<** "\n"**;**

**}**

vector**<int>** ivec**(**10'000**);**

ifs**.**read**(reinterpret\_cast<char\*>(**ivec**.**data**(),** 10'000 **\*** **sizeof(int)));**

**}**

***// bir dosyayı parçalara bölme***

**int** main**(int** argc**,** **char\*** argv**[])**

**{**

**using** **namespace** std**;**

**if** **(**argc **!=** 3**)**

**{**

cerr **<<** "kullanim: <dbol> <dosya ismi> <byte sayisi>\n"**;**

**return** 1**;**

**}**

**char** c**{};**

**int** file\_count**{};**

**int** byte\_count**{};**

**auto** ifs **=** open\_binary\_file**(**argv**[**1**]);**

**int** chunk **=** atoi**(**argv**[**2**]);**

ofstream ofs**;**

ostringstream ostr**;**

ostr**.**fill**(**'0'**);**

**while** **(**ifs**.**get**(**c**))**

**{**

**if** **(!**ofs**.**is\_open**())**

**{**

ostr **<<** "parca" **<<** setw**(**3**)** **<<** file\_count **+** 1 **<<** ".par"**;**

ofs**.**open**(**ostr**.**str**(),** ios**::**binary**);**

**if** **(!**ofs**)**

**{**

cerr **<<** ostr**.**str**()** **<<** "dosya olusturulamadi\n"**;**

**return** 1**;**

**}**

**++**file\_count**;**

**}**

ofs**.**put**(**c**);**

**++**byte\_count**;**

**if** **(**byte\_count **%** chunk **==** 0**)**

**{**

ofs**.**close**();**

**}**

**}**

**}**

**int** main**(int** argc**,** **char** **\*\***argv**)**

**{**

**using** **namespace** std**;**

**if** **(**argc **!=** 2**)**

**{**

cerr **<<** "kullanim: <dbir> <yeni dosya ismi>\n"**;**

**return** 1**;**

**}**

**auto** ofs **=** create\_binary\_file**(**argv**[**1**);**

**int** file\_count**{};**

**for(;;)**

**{**

ostringstream ostr**;**

ostr**.**fill**(**'0'**);**

ostr **<<** "parca" **<<** setw**(**3**)** **<<** file\_count **+** 1 **<<** ".par"**;**

ifstream ifs**{** ostr**.**str**(),** ios**::**binary **};**

**if** **(!**ifs**)**

**break;**

**char** c**;**

**while** **(**ifs**.**get**(**c**))**

**{**

ofs**.**put**(**c**);**

**++**byte\_count**;**

**}**

**++**file\_count**;**

ifs**.**close**();**

**if** **(**remove**(**ostr**.**str**().**c\_str**())**

**{**

cerr **<<** "dosya silinemedi\n"**;**

**return** 2**;**

**}**

**}**

**}**

***// dosya konum göstericisi***

***/\****

***seekg okuma amaçlı konumlandırma --ifstream***

***seekp yazma amaçlı konumlandırma --ofstream***

***tellg okuma konunumu döndürür --ifstream***

***tellp yazma konumunu döndürür --ofstream***

***ios::beg konumlandırma dosyanın başından yapılmak için***

***ios::end konumlandırmanın dosyanın sonunda yapılması için***

***ios::cur dosya konum gösterisinin son konumdan gösterim yapmak için***

***(mevcut konumu döndürür)***

***\*/***

#include <sstream>

#include <iostream>

#include <iomanip>

**int** main**()**

**{**

**using** **namespace** std**;**

istringstream iss**{**"necati ergin"**};**

string str**;**

iss **>>** str**;**

cout **<<** quoted**(**str**)** **<<** "\n"**;** ***// "necati"***

iss**.**seekg**(**0**);** ***// iss.seekg(0, ios::beg) farkı yok***

iss **>>** str**;**

cout **<<** quoted**(**str**)** **<<** "\n"**;** ***// "necati"***

iss**.**seekg**(**1**,** ios**::**cur**);**

iss **>>** str**;**

cout **<<** quoted**(**str**)** **<<** "\n"**;** ***// "ergin"***

iss**.**seekg**(-**6**,** ios**::**cur**);**

iss **>>** str**;**

cout **<<** quoted**(**str**)** **<<** "\n"**;** ***// "ergin"***

iss**.**seekg**(-**6**,** ios**::**end**);**

iss **>>** str**;**

cout **<<** quoted**(**str**)** **<<** "\n"**;** ***// "ergin"***

**}**

**int** main**()**

**{**

**using** **namespace** std**;**

ostringstream oss**{**"furkan mert"**};**

cout **<<** "[" **<<** oss**.**str**()** **<<** "]\n"**;** ***// [furkan mert]***

oss**.**seekp**(**3**);**

oss**.**put**(!);**

cout **<<** "[" **<<** oss**.**str**()** **<<** "]\n"**;** ***// [fur!an mert]***

oss**.**seekp**(**0**);**

oss**.**put**(**'\*'**);**

cout **<<** "[" **<<** oss**.**str**()** **<<** "]\n"**;** ***// [\*ur!an mert]***

**}**

**int** main**()**

**{**

**using** **namespace** std**;**

**auto** ifs **=** open\_binary\_file**(**"primesmillion.dat"**);**

**int** n**{};**

std**::**cout **<<** "kacinci asal sayi : "**;**

cin **>>** n**;**

ifs**.**seekg**((**n **-**1**)** **\*** **sizeof(int),** ios**::**beg**);**

**int** x**;**

ifs**.**read**(reinterpret\_cast<char\*>(&**x**),** **sizeof(int));**

cout **<<** n **<<** ".asal sayi " **<<** x **<<** "\n"**;**

**}**

**void** print\_file**(const** std**::**string**&** filename**,** **int** ntimes**)**

**{**

**auto** ifs **=** open\_text\_file**(**filename**);**

**while** **(**ntimes**--)**

**{**

std**::**cout **<<** ifs**.**rdbuf**();**

**(void)**getchar**();**

ifs**.**seekg**(**0**);**

**}**

**}**

**int** main**()**

**{**

print\_file**(**"main.cpp"**,** 5**);** ***// 5 kez dosyayı yazacak***

**}**

***// gcount()***

**int** main**()**

**{**

**int** **\***p **=** **new** **int[**20000**];**

**auto** ifs **=** open\_binary\_file**(**"primes10000.dat"**);**

ifs**.**read**(reinterpret\_cast<char\*>(**p**),** **sizeof(int)** **\*** 20000**);**

***// 20klık int değeri dolduramadı o yüzden stream hata durumunda oldu***

**if** **(**ifs**)**

**{**

std**::**cout **<<** "stream hata durumunda degil\n"**;**

**}**

**else**

**{**

std**::**cout **<<** "stream hata durumunda\n"**;**

**}**

***// okunan byte sayisi 40'000***

std**::**cout **<<** "okunan byte sayisi : " **<<** ifs**.**gcount**()** **<<** "\n"**;**

**delete** p**;**

**}**