**2023 12 11**

**formatlama**

***/\****

***formatlama nitelikleri 2 ye ayrılır:***

***- on-off bayrakları***

***- alan bayrakları***

***on-off***

***.setf(ios::boolalpha)***

***.unsetf(ios::boolalpha)***

***ios::showbase***

***ios::uppercase***

***ios::skipws***

***ios:showpoint***

***alan bayrakları***

***.setf(ios::hex, ios::basefield);***

***.setf(ios::left, ios::adjustfield);***

***.setf(ios::fixed, ios::floatfield);***

***\*/***

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

**{**

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

std**::**cout **<<** "bir tam sayi girin: "**;**

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

cin**.**setf**(**ios**::**hex**,** ios**::**basefield**);** ***// ab girdik***

cin **>>** x**;** ***// 171 çıktı***

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

**int** k**{};**

**int** l**{};**

**int** m**{};**

cin **>>** hex **>>** k **>>** oct **>>** l **>>** dec **>>** m**;**

**}**

***///////***

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

**{**

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

cin**.**unsetf**(**ios**::**dec**);**

***// hiçbir if'e girmez***

**if** **(**cin**.**flags**()** **&** ios**::**hex**)** **{** std**::**cout "hex set\n"**;}**

**if** **(**cin**.**flags**()** **&** ios**::**dec**)** **{** std**::**cout "dec set\n"**;}**

**if** **(**cin**.**flags**()** **&** ios**::**oct**)** **{** std**::**cout "oct set\n"**;}**

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

***// kendi karar verir hangisi olacağına***

cout **<<** "bir sayi girin: "**;**

cin **>>** x**;**

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

**}**

***// setbase***

#include <iomanip> ***// parametreli manipülatör için bu lib kullanılır***

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

**{**

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

**int** x**;**

cin **>>** setbase**(**0**);** **>>** x**;**

cin **>>** hex **>>** x**;**

**}**

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

**{**

***/\* std::unitbuf() kullanmadık. Eğer fonksiyona gönderilen arguman bir***

***namespace ilişkin türden ise fonksiyon o namespace içinde aranır. Buna***

***ADL (argument dependent lookup)***

***\*/***

unitbuf**(**std**::**cout**);**

endl**(**std**::**cout**);**

flush**(**std**::**cout**);**

**}**

***// C memory yazma***

#include <cstdio>

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

**{**

**int** x **=** 5**;**

**double** dval **=** 4.5**;**

**char** name**[]** **=** "melike"**;**

**char** buffer**[**256**];**

sprintf**(**buffer**,** "x = %d dval = %f name = %s"**,**x **,**dval**,** name**);**

**int** k**,** l**,** m**;**

**char** buf**[]** **=** "213 456 790"**;**

sscanf**(**buf**,** "%d%d%d"**,** **&**k**,** **&**l**,** **&**m**);**

printf**(**"k = %d l = %d m = %d);

**}**

***// C++ belleğe formatlı yazma***

#include <sstream>

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

**{**

***// basic\_ostringstream<char> = ostringstream<char> aynı anlamda türeş işim***

ostringstream os**;**

**int** amount **=** 200'000**;**

os **<<** "benim " **<<** amount **<<** " dolarim var\n"**;**

**auto** s **=** os**.**str**();**

reverse**(**s**.**begin**(),** s**.**end**());**

cout **<<** s **<<** "\n"**;**

os **<<** " emre"**;**

**auto** s **=** os**.**str**()** ***// üzerine yazar***

**}**

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

**{**

**int** day**,** mon**,** year**;**

cout **<<** "tarihi giriniz: "**;**

cin **>>** day **>>** mon **>>** year**;**

ostringstream oss**;**

oss **<<** setfill**(**'0'**)** **<<** setw**(**2**)** **<<** day **<<** '\_' **<<** setw**(**2**)** **<<** mon **<<** '\_' **<<** year **<<** ".txt"**;**

cout **<<** "[" **<<** oss**.**str**()** **<<** "]"**;** ***//04\_08\_1987.txt***

**}**

***// mülakat sorusu***

**class** date

**{**

**public:**

date**(int** day**,** **int** mon**,** **int** year**)** **:** day\_**(**day**),** mon\_**(**mon**),** year\_**(**year**){}**

**friend** std**::**ostream**&** **operator<<(**std**::**ostream**&** os**,** **const** date**&** dt**)**

**{**

***//40 karakterlik alana sadece 11 yazar çıktı 11 -12-2023mustafa***

***//return os << dt.day\_ << "-" << dt.mon\_ << "-" << dt.year\_;***

os **<<** dt**.**day\_ **<<** "-" **<<** dt**.**mon\_ **<<** "-" **<<** dt**.**year\_**;**

***// 11-12-2023mustafa yazar***

**return** os**.**str**();**

**}**

**private:**

**int** day\_**,** mon\_**,** uerar\_**;**

**}**

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

**{**

date mydate**{** 11**,** 12**,** 2023**};**

cout **<<** left **<<** setw**(**40**)** **<<** mydate **<<** "mustafa\n"**;**

**}**

***// ostringstream formatlama***

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

**{**

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

ostringstream oss**;**

oss **<<** hex **<<** uppercase **<<** showbase**;**

oss **<<** 47802 **<<** " " **<<** 54807**;**

cout **<<** oss**.**str**()** **<<** "\n"**;** ***// 0XBABA 0XD617***

**}**

***//istreamstream***

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

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

**{**

cout **<<** "toplanacak sayilari girin: "**;**

string str**;**

getline**(**cin**,** str**);**

cout **<<** "[" **<<** str **<<** "]"**;**

istreamstream iss **{**str**};**

**int** ival**;**

**int** sum**{};**

**while(**iss **>>** ival**){**

sum **+=** ival**;**

cout **<<** ival **<<** "\n"**;**

**}**

cout **<<** sum**;**

**}**

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

**{**

cout **<<** "sayilar giriniz: "**;**

string str**;**

getline**(**cin**,** str**);**

istreamstream iss**{** str **};**

**int** ival**;**

vector**<int>** ivec**;**

**while(**iss **>>** ival**)**

**{**

ivec**.**push\_back**(**ival**);**

**}**

sort**(**ivec**.**begin**(),** ivec**.**end**());**

**for** **(const** **auto** val **:** ivec**)**

**{**

cout **<<** val **<<** "\n"**;**

**}**

**}**

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

**{**

cout **<<** "bir cumle girin : "**;**

string str**;**

getline**(**cin**,** str**);**

istringstream iss**(**str**);**

string word**;**

vector**<**string**>** svec**;**

**while** **(**iss **>>** word**)**

**{**

svec**.**push\_back**(**move**(**word**));**

**}**

mt19937 eng**;**

**for** **(int** i **=** 0 **;** i **<** 20**;** **++**i**)**

**{**

shuffle**(**svec**.**begin**(),** sved**.**end**(),** eng**);**

copy**(**svec**.**begin**(),** svec**.**end**(),** ostream\_iterator**<**string**>(**cout**,** " "**);**

**}**

**}**

***// condition state --iostate***

/\*

.good() akım(stream) sağlıklı durumdaysa true

.eof() akım hata durumunda ve hatanın nedeni stream karakter olmadıysa true döner

.fail() akımda hata var ama kullanabiliriz

.bad() // akımda hata var ve akımı kullanamayız

\*/

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

**{**

cout **<<** boolalpha**;**

cout **<<** "bir tam sayi giriniz: "**;**

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

cin **>>** x**;** ***// string verirsek fail ve bad true dönür int verirse good true döner***

cout **<<** "cin.good() : " **<<** cin**.**good**()** **<<** "\n"**;** ***// true***

cout **<<** "cin.eof() : " **<<** cin**.**eof**()** **<<** "\n"**;** ***// false***

cout **<<** "cin.fail() : " **<<** cin**.**fail**()** **<<** "\n"**;** ***// false***

cout **<<** "cin.bad() : " **<<** cin**.**bad**()** **<<** "\n"**;** ***// false***

**}**

***// iostate***

/\*

ios::goodbit

ios::eofbit

ios::failbit

ios::badbit

\*/

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

**{**

cout **<<** ios**::**goodbit**;** ***// 0 yazar***

cout **<<** ios**::**eosbit**;** ***// 1 yazar***

cout **<<** ios**::**failbit**;** ***// 2 yazar***

cout **<<** ios**::**badbit**;** ***// 4 yazar***

**}**

**void** print\_state**(const** ios**&** s**)**

**{**

**const** **auto** stream\_state **=** s**.**rdstate**();**

**if** **(**stream\_state **==** 0**)**

**{**

cout **<<** "stream is ok not bit set\n"**;**

**}**

**if** **(**stream\_state **&** ios**::**failbit**)**

**{**

cout **<<** "failbit set\n"**;**

**}**

**if** **(**stream\_state **&** ios**::**badbit**)**

**{**

cout **<<** "badbit set\n"**;**

**}**

**if** **(**stream\_state **&** ios**::**eosbit**)**

**{**

cout **<<** "eosbit set\n"**;**

**}**

**}**

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

**{**

**int** x **;**

cin **>** x**;**

print\_state**(**cin**);** ***// 12 ok , ali --failbad set, ctrl z eosbit set***

***// eğer state hata durumdaysa yazmaya devam etmez***

cin**.**clear**();**

print\_state**(**cin**);** ***// hata flaglari sonlandırır ve good hale getirir***

**if** **(**cin**)** ***// cin.good()***

**{**

std**::**cout **<<** "ok\n"**;**

**}**

**if** **(!**cin**)** ***// cin.fail()***

**{**

std**:**cout **<<** "not ok\n"**;**

**}**

**}**

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

**{**

cout **<<** "bir tam sayi girin : "**;**

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

**while** **(!(**cin **>>** x**))**

**{**

**if** **(**cin**.**eof**())**

**{**

std**::**cout **<<** "ama hic giris yapmadiniz ki\n"**;**

cin**.**clear**();**

cout **<<** "tekrar deneyin\n"**;**

**}**

**else**

**{**

cin**.**clear**();**

string sline**;**

getline**(**cin**,** sline**);**

cout **<<** qouted**(**sline**)** **<<** "gecerli bir sayi degil... tekrar deneyin\n"**;**

**}**

**}**

**}**

***// cin.exceptions()***

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

**{**

**auto** cstate **=** cin**.**exceptions**();** ***// good state döner ios::good***

cin**.**exceptions**(**ios**::**eofbit**);** ***// eofbit exception throw eder***

cin**.**exceptions**(**ios**::**failbit **|** ios**::**badbit**);** ***// failbit ya da badbit exception throw eder***

**}**

***// istream\_iterator***

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

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

**{**

cout **<<** "sayilar giriniz: "**;**

***// toplama yapacak girilen değerlerin***

cout **<<** accumulate**(**istream\_iterator**<int>{**cin**},** istream\_iterator**<int>{},** 0**)** **<<**"\n"**;**

cout **<<** max\_element**(**istream\_iterator**<int>{**cin**},** istream\_iterator**<int>{})** **<<** "\n"**;**

string str**{**"2.3 5.6 6.7 4.5 1.2 4.4 3.9"**}**

istringstream iss**(**str**);**

vector**<double>** dvec**{**istream\_iterator**<double>{**iss**},** istream\_iterator**<double>{}};**

**}**