// Test.cpp

//Add #include <iostream to stdafx.h

//Add code up to each BUILD and TEST

//two errors occur, comment out the line of code and continue

#include"stdafx.h"

usingnamespace **std;**

int **\_tmain(**int **argc, \_TCHAR\* argv[])**

{

//object instantiation - uninitialized

int **temperature;**

double **price;**

char **firstInitial;**

//display current state of uninitialized temperature object

**cout <<** "Temperature is " **<< temperature << endl;**

//BUILD and TEST – Execution crash

//COMMENT OUT LINE OF CODE

//object instantiation - with initialization

int **age = 22;**

constint **MONTHS\_IN\_YEAR = 12;**

**cout <<** "Your age is " **<<age << endl;;**

**cout <<** "\t\tThere are " **<< MONTHS\_IN\_YEAR**

**<<** " months in a year\n\n\n";

//BUILD and TEST

**cout <<** "\t\t\t\t\t\t\t\tPress enter to continue : ";

**cin.get();**

//literal objects may be used in code

**cout <<** "\tShowing literal objects\n";

**cout <<** "Showing " **<< 2 << endl;**

**cout <<** "Showing " **<< 2.56 << endl;**

**cout <<** "Showing " **<<** 'A' **<< endl;**

**cout <<** "Showing " **<<** "Jim" **<< endl;**

//BUILD and TEST

**cout <<** "\t\t\t\t\t\t\t\tPress enter to continue : ";

**cin.get();**

//Show use of assignment operator

**cout <<** "\tShowing use of assignment operator\n";

**temperature = 22;**

**price = 5.99;**

**firstInitial =** 'A';

**cout <<** "Temperature is " **<< temperature << endl;**

**cout <<** "Price is " **<< price << endl;**

**cout <<** "First initial is " **<< firstInitial << endl;**

//BUILD and TEST

**cout <<** "\t\t\t\t\t\t\t\tPress enter to continue : ";

**cin.get();**

//misuse of assignment operator

**40 = temperature;**

//BUILD and TEST – compile error

**cout <<** "\t\t\t\t\t\t\t\tPress enter to continue : ";

**cin.get();**

//show use of arithmetic operators

**cout <<** "\tResults of arithmetic operators are ";

**cout << 22 + 5 <<** "\t";

**cout << 22 - 5 <<** "\t";

**cout << 22 \* 5 <<** "\t";

**cout << 22 / 5 <<** "\t";

**cout << 22 % 5 << endl;**

//BUILD and TEST

**cout <<** "\t\t\t\t\t\t\t\tPress enter to continue : ";

**cin.get();**

//show effect of operator precedence

**cout <<** "\tShowing effect of operator precedence\n";

**cout <<** "Answer is " **<< 2 + 3 \* 4 << endl;**

**cout <<** "Answer is " **<< ( 2 + 3 ) \* 4 << endl;**

//BUILD and TEST

**cout <<** "\t\t\t\t\t\t\t\tPress enter to continue : ";

**cin.get();**

//show implicit type casting

**cout <<** "\tShowing effect of implicit type casting\n";

int **x;**

double **y;**

**x = 2 + 3.444;**

**cout <<** "integer x = " **<< x << endl;**

**y = 2 + 3.444;**

**cout <<** "double y = " **<< y << endl;**

//BUILD and TEST

**cout <<** "\t\t\t\t\t\t\t\tPress enter to continue : ";

**cin.get();**

//show effect of integer division

**cout <<** "\tShowing results of integer division\n";

**x = 17 / 5;**

**cout <<** "integer x = " **<< x << endl;**

**y = 17 / 5;**

**cout <<** "without casting double y = " **<< y << endl;**

**y = (**double)17 / 5;

**cout <<** "with casting y = " **<< y << endl;**

//BUILD and TEST

**cout <<** "\t\t\t\t\t\t\t\tPress enter to continue : ";

**cin.get();**

//show use combined operators

**cout <<** "\tShowing use of combined operators\n";

**temperature += 3;**

**cout <<** "Temperature is " **<< temperature << endl;**

**temperature \*= 3;**

**cout <<** "Temperature is " **<< temperature << endl;**

**temperature /= 3;**

**cout <<** "Temperature is " **<< temperature << endl;**

**temperature %= 3;**

**cout <<** "Temperature is " **<< temperature << endl;**

//BUILD and TEST

**cout <<** "\t\t\t\t\t\t\t\tPress enter to continue : ";

**cin.get();**

//show use of increment and decrement operators

**cout <<** "\tShowing use of increment and decrement operators\n";

**temperature++;**

**cout <<** "Temperature is " **<< temperature << endl;**

**temperature--;**

**cout <<** "Temperature is " **<< temperature << endl;**

//BUILD and TEST

**cout <<** "\t\t\t\t\t\t\t\tPress enter to continue : ";

**cin.get();**

//show effect of pre and post incrementing

**temperature = 33;**

**cout <<** "Temperature with pre-increment is " **<< ++temperature << endl;**

**temperature = 33;**

**cout <<** "Temperature with post-increment is " **<< temperature++ << endl;**

**cout <<** "Temperature is now " **<< temperature << endl;**

//BUILD and TEST

**cout <<** "\t\t\t\t\t\t\t\tPress enter to continue : ";

**cin.get();**

//show use of io manipulators- add #include <iomanip> to stdafx.h

**cout <<** "\tUsing io manipulators\n";

**cout << setw(5) << 22 << endl;**

**cout << setfill(**'0') << setw(5) << 22 << endl;

**cout << setprecision(5) << 123.4567 << endl;**

**cout << fixed << setprecision(2) << 123.4567 << endl;**

**y = (**double)17 / 5;

**cout <<** "y = " **<< fixed << setprecision(2) << y << endl;**

//BUILD and TEST

**cout <<** "\t\t\t\t\t\t\t\tPress enter to continue : ";

**cin.get();**

//show use of data input during execution

**cout <<** "Enter a new value for the temperature :";

**cin >> temperature;**

**temperature += 5;**

**cout <<** "Increased temperature is " **<< temperature << endl;**

//BUILD and TEST

return **0;**

}