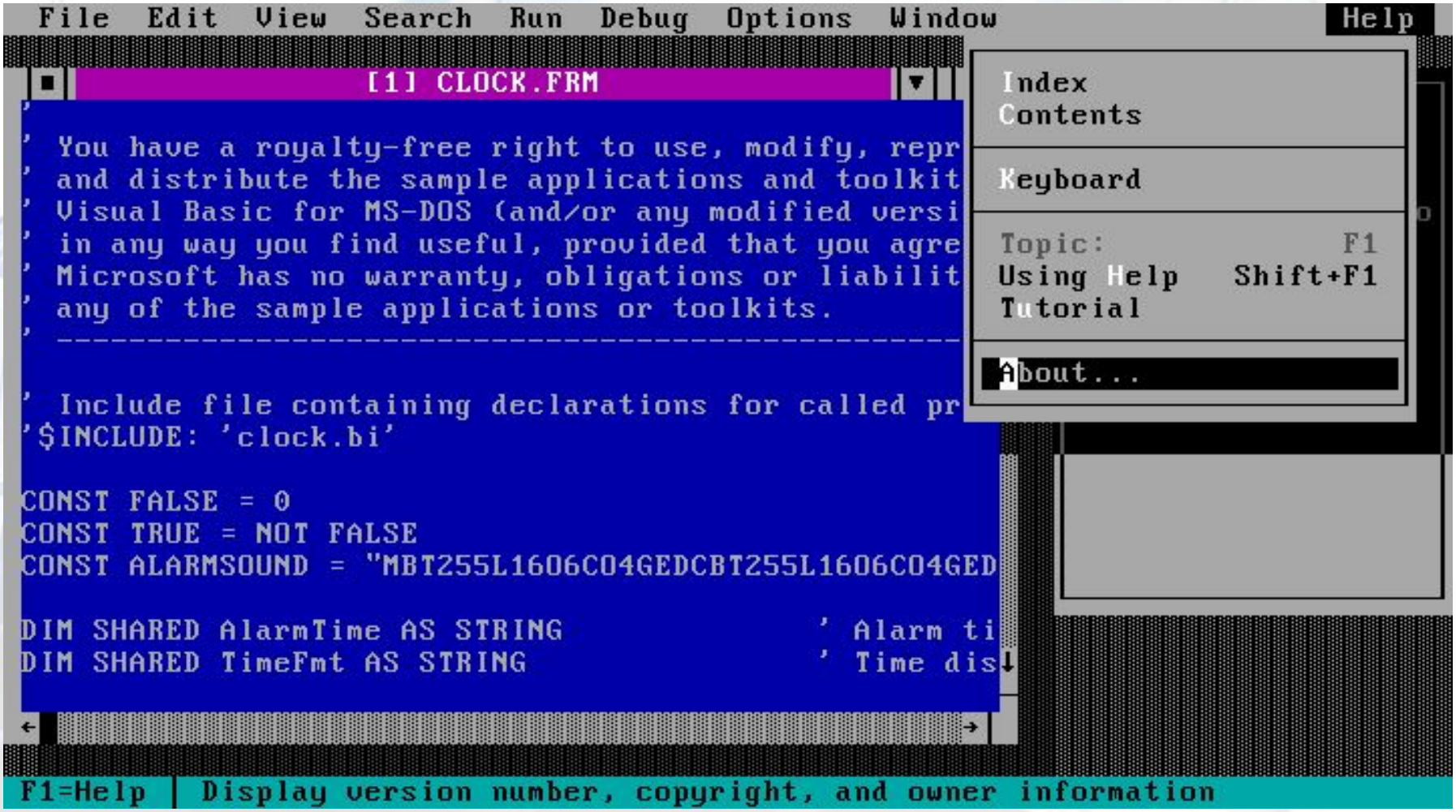
L/O/G/O

Programming languages.

BASIC


File Edit View Search Run Debug Options Window Help
[1] CLOCK.FRM
' You have a royalty-free right to use, modify, repr
' and distribute the sample applications and toolkit
' Visual Basic for MS-DOS (and/or any modified versi
' in any way you find useful, provided that you agre
' Microsoft has no warranty, obligations or liabilit
' any of the sample applications or toolkits.
' Include file containing declarations for called pr
'$INCLUDE: 'clock.bi'
CONST FALSE = 0
CONST TRUE = NOT FALSE
CONST ALARMSOUND = "MBT255L16O6CO4GEDCBT255L16O6CO4GED
DIM SHARED AlarmTime AS STRING ' Alarm ti
DIM SHARED TimeFmt AS STRING ' Time dis
Index
Contents
Keyboard
Topic: F1
Using Help Shift+F1
Tutorial
About...
F1=Help | Display version number, copyright, and owner information

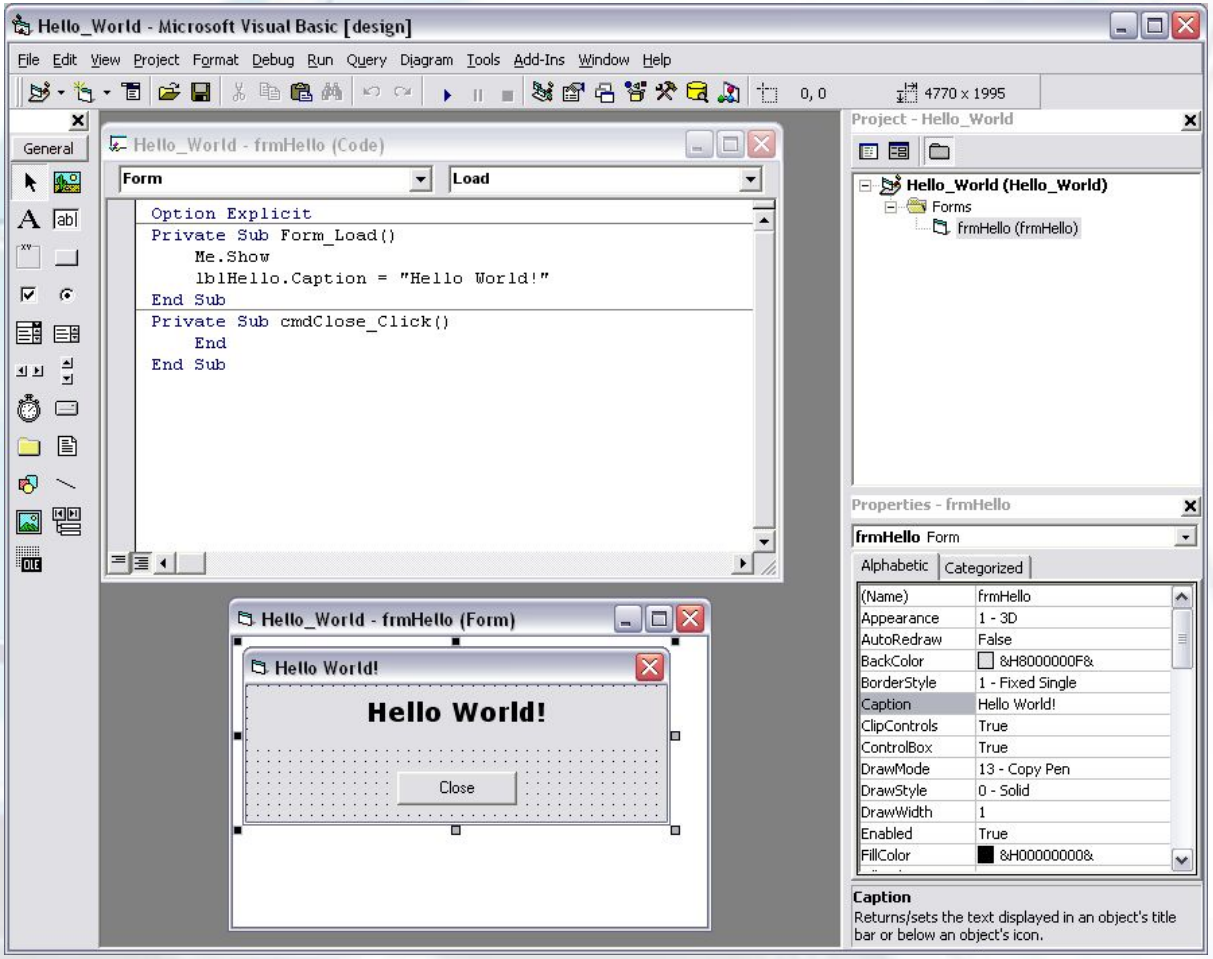
- The BASIC has been thought up in 1963 by teachers of Dartsmut College John Kemen and Thomas Kurtts, and under their management has been realized by a of students of college.

- The BASIC has been designed so that students could write programs without difficulties, using terminals with time division. It intended for more "simple" users not so much interested in speed of execution of programs, how many is simple in possibility to use computer for decision of the problems without having special preparation.

- The modern language should:

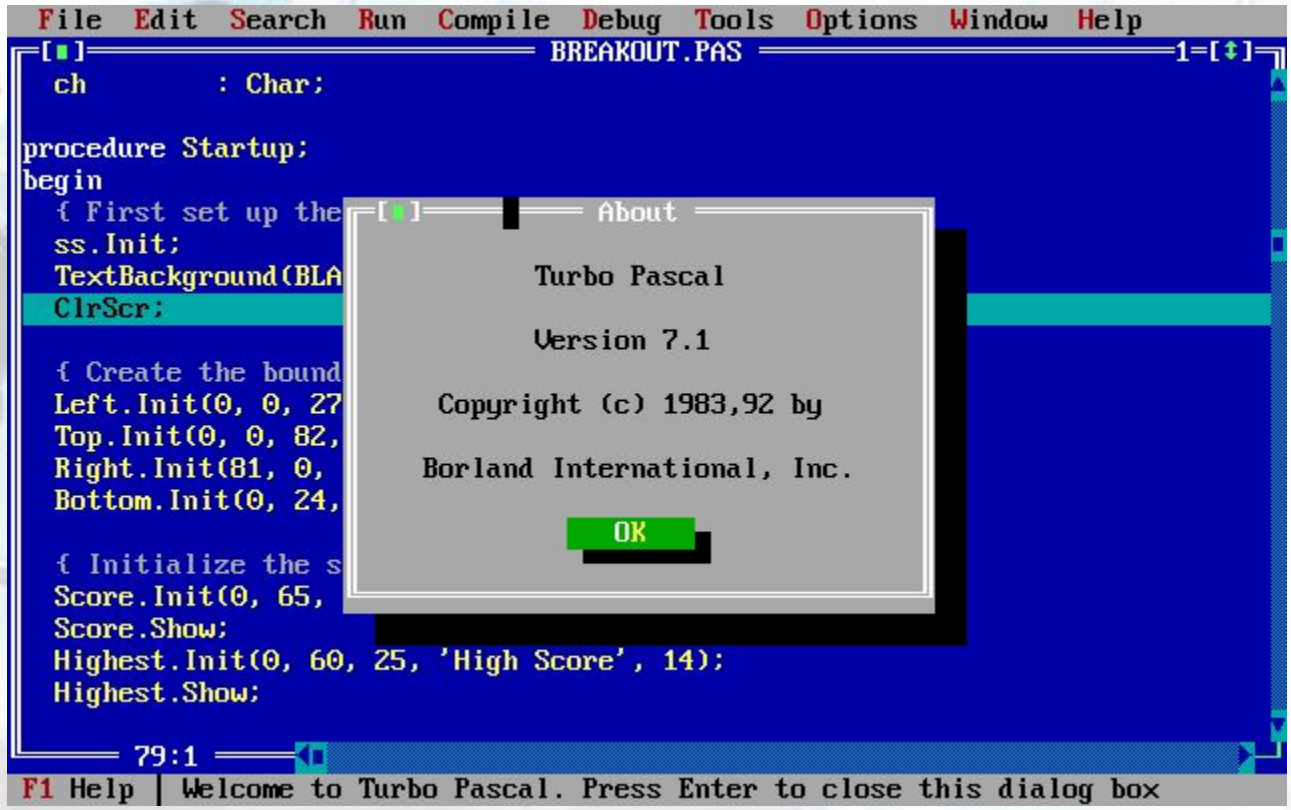
- 1. Be simple in use for beginners
- 2. To be a general purpose programming language
- 3. To give possibility of expansion of the functionality, accessible to skilled programmers
- 4. To be interactive
- 5. To give clear error messages
- 6. Quickly to work on small programs
- 7. Not to demand understanding of work of hardware maintenance
- 8. To protect the user from an operating system

Visual Basic



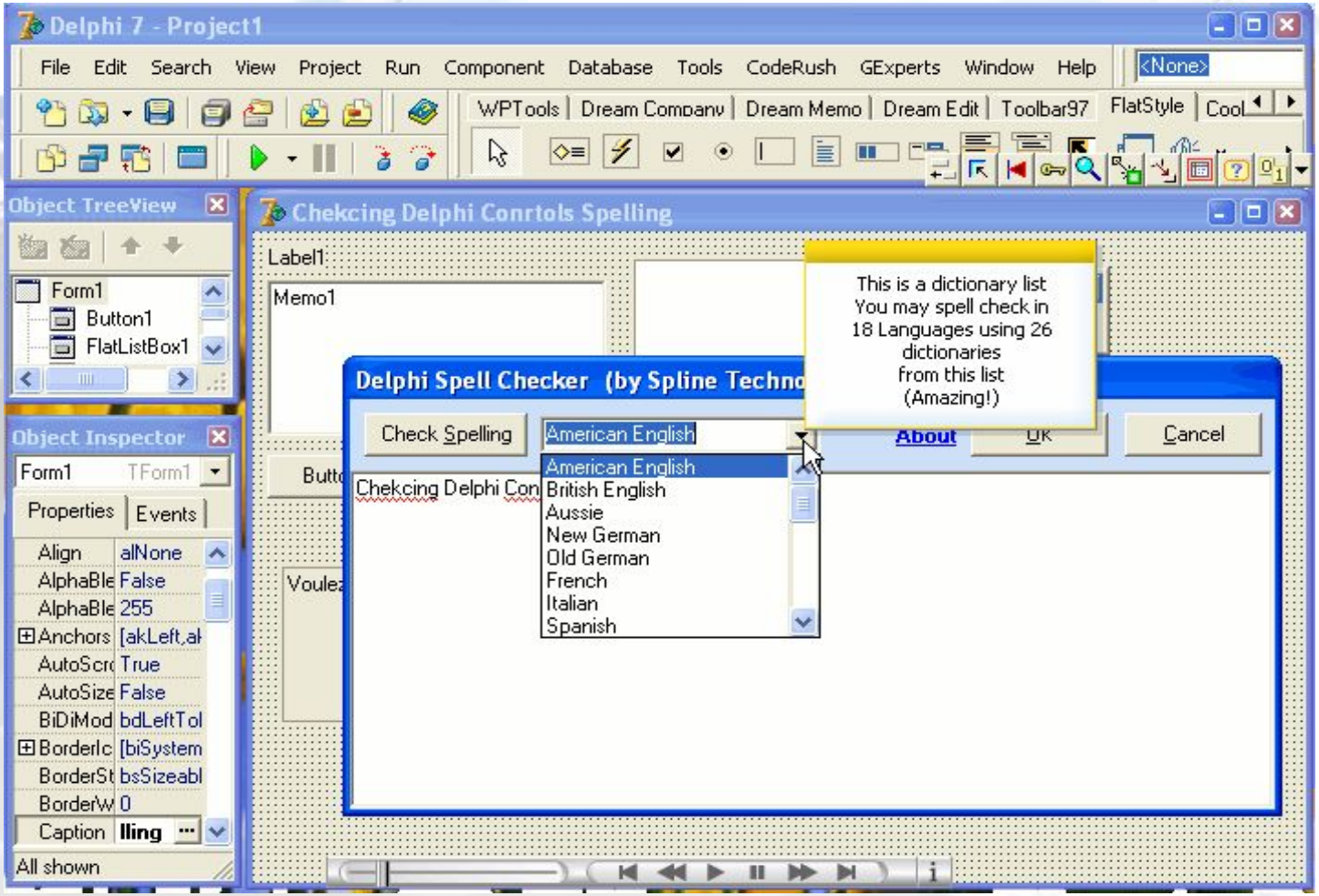
- Microsoft Visual Basic — means of working out of the software, developed by corporation Microsoft both including a programming language and the graphic interface. The first version has been let out in 1991. Visual Basic combines procedures and elements of the object-oriented programming languages. Visual Basic is considered good means of fast working out of prototypes of the program, for applications programming of databases and in general for a way of creation of the programs working ONLY under control of family Microsoft Windows operating systems.

Pascal


File Edit Search Run Compile Debug Tools Options Window Help
BREAKOUT.PAS
ch : Char;
procedure Startup;
begin
{ First set up the
ss.Init;
TextBackground(BLA
ClrScr;
{ Create the bound
Left.Init(0, 0, 27
Top.Init(0, 0, 82,
Right.Init(81, 0,
Bottom.Init(0, 24,
{ Initialize the s
Score.Init(0, 65,
Score.Show;
Highest.Init(0, 60, 25, 'High Score', 14);
Highest.Show;
About
Turbo Pascal
Version 7.1
Copyright (c) 1983,92 by
Borland International, Inc.
OK
79:1
F1 Help | Welcome to Turbo Pascal. Press Enter to close this dialog box

- Pascal — a higher-level programming language of general purpose. One of the most known programming languages, is widely applied in industrial programming, training to programming at the higher school, is base for a great number of other languages. Pascal has been created by Niklaus Virt in 1968-69. It has been published in 1970 by Virt as small and effective language to promote good style of programming, to use structural programming and the structured data.

Delphi

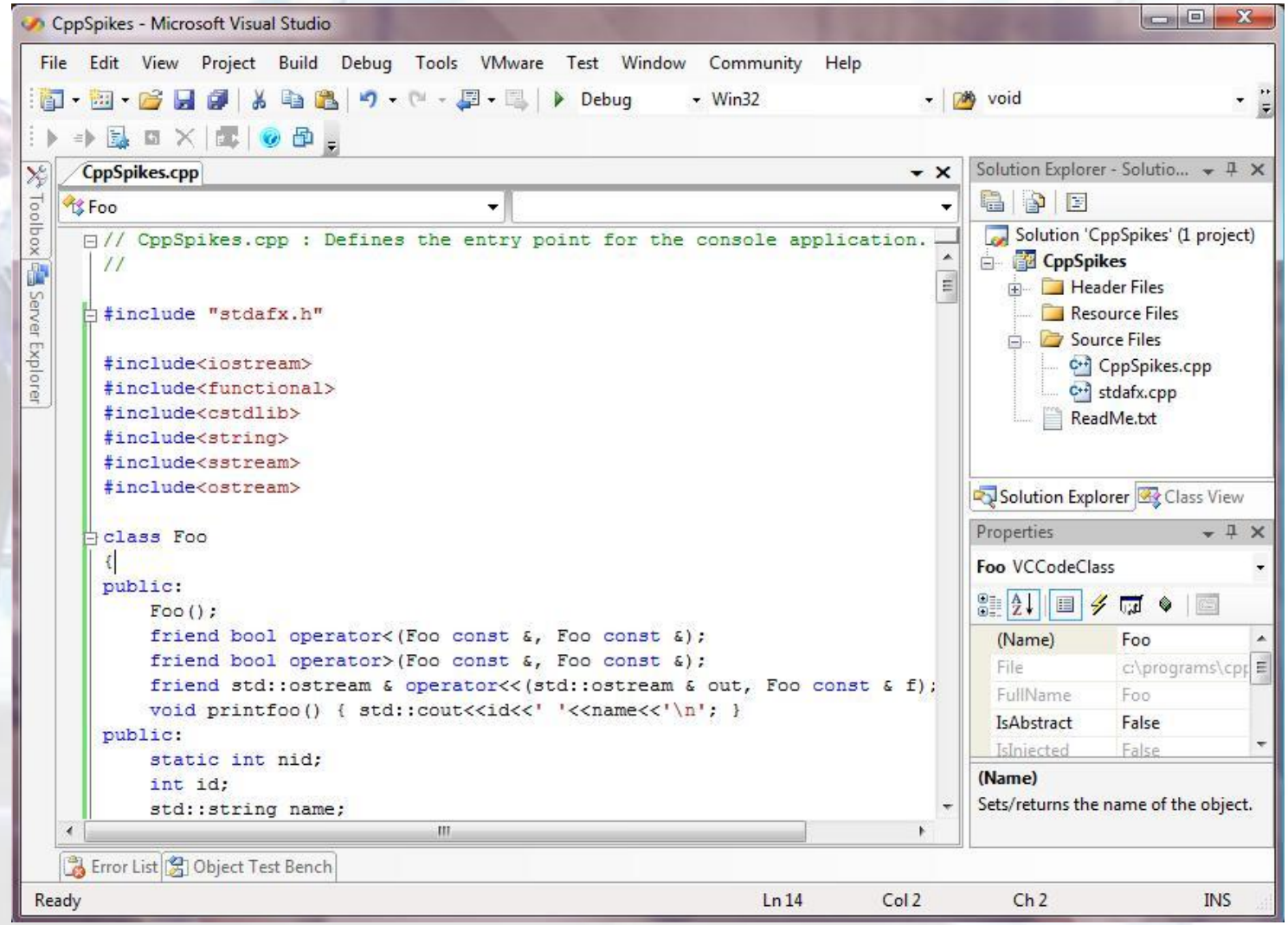

Delphi 7 - Project1
File Edit Search View Project Run Component Database Tools CodeRush GExperts Window Help
Object TreeView
Form1
Button1
FlatListBox1
Object Inspector
Form1 TForm1
Properties Events
Chekcing Delphi Conrtols Spelling
Label1
Memo1
This is a dictionary list
You may spell check in
18 Languages using 26
dictionaries
from this list
(Amazing!)
Delphi Spell Checker (by Spline Techno
Check Spelling
American English
About
OK
Cancel
American English
British English
Aussie
New German
Old German
French
Italian
Spanish
Chekcing Delphi Con

- Delphi is a programming language which is used in the environment of working out with the same name. At first language was called Object Pascal. Since Wednesday of working out Delphi 7.0, in official documents Borland began to use name Delphi for a designation of language Object Pascal. Delphi — result of development of language Pascal. Delphi has added in Pascal dynamic identification of type of the data with access possibility to the metadata of classes (that is to the description of classes and their members) in a compiled code.

C

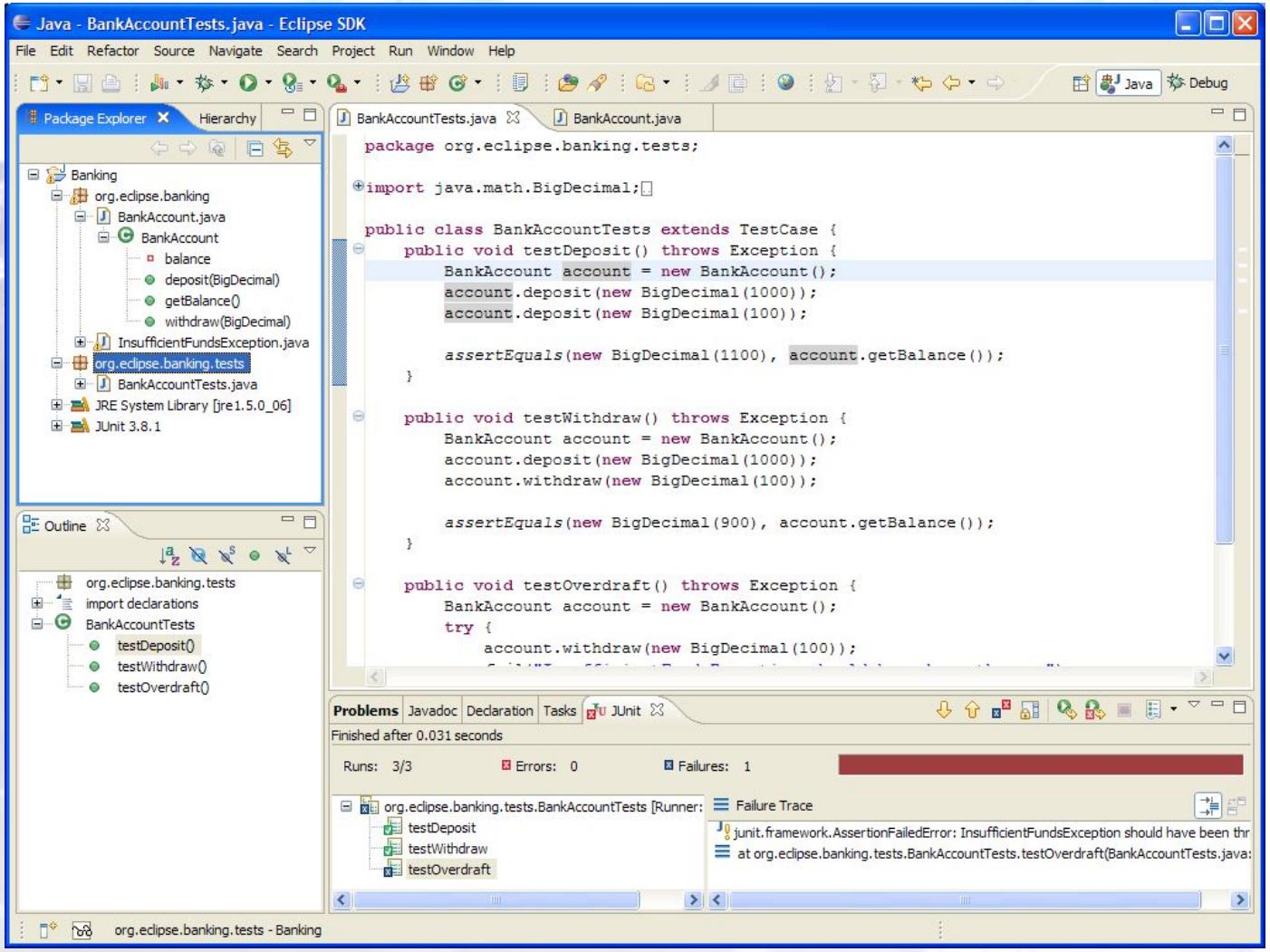
- C — the standardized procedural programming language developed in the early seventies by the company Bell Labs. C has been created for use in operating system UNIX. Since then it was transferred on many other operating systems and became one of the most used programming languages.. It is the most popular language for creation of the system software. It is also often used for creation of applied programs. In spite of the fact that C was not developed for beginners, it is widely used for training to programming. Further syntax of language C became a basis for many other languages such as C ++ and Java

C++


CppSpikes - Microsoft Visual Studio
File Edit View Project Build Debug Tools VMware Test Window Community Help
Debug
Win32
void
CppSpikes.cpp
Foo
// CppSpikes.cpp : Defines the entry point for the console application.
//
#include "stdafx.h"
#include<iostream>
#include<functional>
#include<cstdlib>
#include<string>
#include<sstream>
#include<ostream>
class Foo
{
public:
Foo();
friend bool operator<(Foo const &, Foo const &);
friend bool operator>(Foo const &, Foo const &);
friend std::ostream & operator<<(std::ostream & out, Foo const & f);
void printfoo() { std::cout<<id<<' '<<name<<'\n'; }
public:
static int nid;
int id;
std::string name;
Solution Explorer - Solutio...
Solution 'CppSpikes' (1 project)
CppSpikes
Header Files
Resource Files
Source Files
CppSpikes.cpp
stdafx.cpp
ReadMe.txt
Solution Explorer
Class View
Properties
Foo VCCodeClass
(Name) Foo
File c:\programs\cpp
FullName Foo
IsAbstract False
(Name)
Sets/returns the name of the object.
Error List
Object Test Bench
Ready
Ln 14
Col 2
Ch 2
INS

- C ++ is the statically typified programming language of general purpose. Supporting different paradigms of programming, combines properties both higher-level, and low-level languages. Being one of the most popular programming languages, C ++ is widely used for software working out. The area of its application includes operating systems, applied programs, drivers of devices, appendices for built in systems, high-efficiency servers, and also entertaining appendices, for example, video games. There are some realizations of language, both free, and commercial.

Java


Java - BankAccountTests.java - Eclipse SDK
File Edit Refactor Source Navigate Search Project Run Window Help
Java Debug
Package Explorer Hierarchy
Banking
org.eclipse.banking
BankAccount.java
BankAccount
balance
deposit(BigDecimal)
getBalance()
withdraw(BigDecimal)
InsufficientFundsException.java
org.eclipse.banking.tests
BankAccountTests.java
JRE System Library [jre1.5.0_06]
JUnit 3.8.1
Outline
org.eclipse.banking.tests
import declarations
BankAccountTests
testDeposit()
testWithdraw()
testOverdraft()
BankAccountTests.java
BankAccount.java
package org.eclipse.banking.tests;
import java.math.BigDecimal;
public class BankAccountTests extends TestCase {
public void testDeposit() throws Exception {
BankAccount account = new BankAccount();
account.deposit(new BigDecimal(1000));
account.deposit(new BigDecimal(100));
assertEquals(new BigDecimal(1100), account.getBalance());
}
public void testWithdraw() throws Exception {
BankAccount account = new BankAccount();
account.deposit(new BigDecimal(1000));
account.withdraw(new BigDecimal(100));
assertEquals(new BigDecimal(900), account.getBalance());
}
public void testOverdraft() throws Exception {
BankAccount account = new BankAccount();
try {
account.withdraw(new BigDecimal(100));
Problems Javadoc Declaration Tasks JUnit
Finished after 0.031 seconds
Runs: 3/3
Errors: 0
Failures: 1
org.eclipse.banking.tests.BankAccountTests [Runner:
testDeposit
testWithdraw
testOverdraft
Failure Trace
junit.framework.AssertionFailedError: InsufficientFundsException should have been thr
at org.eclipse.banking.tests.BankAccountTests.testOverdraft(BankAccountTests.java:
org.eclipse.banking.tests - Banking

- The main difference of Java is that programs on Java are broadcast in the byte-code which is carried out by virtual machine Java (JVM) — the program processing a byte code and telling the instruction to the equipment as the interpreter, but with that difference that a byte code, unlike the text, is processed much faster.

Advantage of a similar way of performance of programs — in full independence of a byte-code of an operating system and the equipment that allows to carry out Java-appendices on any device for which there is a corresponding virtual car. Other important feature of technology Java is the flexible system of safety thanks to that program execution is completely supervised by virtual car. Any operations which exceed the installed powers of the program (for example, attempt of unapproved access to the data or connections with other computer) cause immediate interruption.