

ALGEBRAIC PROGRAMMING SYSTEM

```

solve_lin:=rs(x,y,z,i)(
  (V i + y = z) = (V i = canpl( z+y $ (-1))),
  (V i $ x + y = z) = (V i = canpl((z+y $ (-1)) $ (1.0/x))),
  ( x + y = z) = solve_lin(y = canpl(z+(-1) * x)),
  (V i $ x = z) = (V i = canpl(z $ (1.0/x))),
  (V i = z) = (V i=z),
  ( x = x) = (x = x),
  ( x = z) = 0
);

```

Example of program in the algebraic programming system

Areas of Application

The system is designed for organizations that produce systems for verification, testing, analysis, and transformation of programs and for developers of software applications using algebraic programming language APLAN

Specification

The system is compatible with Linux and Windows and can operate in the online mode

Advantages

The system has no counterparts in Ukraine. It is the fastest term rewriting system as compared with all major world competitors. The system has interfaces with all major theorem proving systems or algebraic programming systems designed for solving specific problems

Stage of Development. Suggestions for Commercialization

IRL6, TRL4
Commercial versions of software system and staff training are provided upon request

IPR Protection

IPR1, IPR3

Contact Information

Sergii V. Yershov, Glushkov Institute of Cybernetics of the NAS of Ukraine;
+38 044 526 41 78, e-mail: ErshovSV@nas.gov.ua