



INTERNATIONAL STANDARD ISO/IEC 13211-1:1995
TECHNICAL CORRIGENDUM 1

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Information technology — Programming languages — Prolog

Part 1: General core

TECHNICAL CORRIGENDUM 1

Technologies de l'information — Langages de programmation — Prolog

Partie 1: Noyau général

RECTIFICATIF TECHNIQUE 1

Technical Corrigendum 1 to ISO/IEC 13211-1:1995 was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 22, *Programming languages, their environments and system software interfaces*

NOTE Some text in Mathematical font is expressed using Latex convention, i.e. surrounded with '\$' signs.

3.106 mapping

'mapping' is used with a second meaning in the standard: add a second definition

A function from a value of one type T to a value of another type R denoted by $T \rightarrow R$

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3.108 most general unifier (MGU)

Replace 'instance' by 'example' because 'instance' is not being used with the meaning defined in 3.95.

3.125 partial list

Replace 'A variable' by 'A *variable*'.

Replace 'second argument' by 'second *argument*'.

3.148 read-term

Replace 'end token.' by 'end token'.

4.1.3.5 Axiom

Replace:

Axiom: if $x > 0$ then \sqrt{x} is the positive square root of x else **undefined**.

by

Axiom: if $x \geq 0$ then \sqrt{x} is the non-negative square root of x else **undefined**.

6.3.7 Term -- double quoted list notation

If a double quoted list represents an atom (i.e. the Prolog flag 'double_quotes' has value 'atom'), the priority of the term should depend on whether or not the atom is an operator as in 6.3.1.3. ISO/IEC 13211-1 states that the priority of an atom represented by a double quoted list is always zero.

Replace the syntax rule by the four syntax rules:

term = double quoted list ;

Abstract: / *dq/*

Priority: 0

Condition: Prolog flag double_quotes has value chars

term = double quoted list ;

Abstract: / *dq/*

Priority: 0

Condition: Prolog flag double_quotes has value code

atom = double quoted list ;

Abstract: a *dq/*

Priority: *n*

Condition: Prolog flag double_quotes has value atom

Condition: a is an operator

atom = double quoted list ;

Abstract: a *dq/*

Priority: 0

Condition: Prolog flag double_quotes has value atom

Condition: a is not an operator

7.2.5 c) 2)

Replace

2) if XN is the ...

by

2) XN is the ...

7.8.5.4

Replace the first sentence:

Tables 27 and 28 show the execution stack before and after executing the control construct ', ' (First, second).

by

Tables 27 and 28 show the execution stack before and after executing the control construct ', ' (First, Second).

Table 35 line 2

Replace

`(else(W), CP)`

by

`(Else, CP)`**7.8.8.4 last example**

Replace

`';'('->'(!,fail), true), true).`

by

`';'(('->'(!,fail), true), true).`**7.9.2**

Add additional errors:

i) The value of an argument `Culprit` is not a member of the set `I`- `type_error(integer, Culprit)`j) The value of an argument `Culprit` is not a member of the set `F`- `type_error(float, Culprit)`

9.1.7 example no. 35 shows these errors are required.

7.12.2 i)

Twice replace

`imp_dep_atom`

by

`Imp_dep_atom`**8.8.1.1 d)**

Replace

Chooses the first element of the list `L`

by

Chooses the first element of the list `L`; unifies it with the term `clause(Head,Body)`

Similarly for f).

8.9.4.1 abolish/1: Description

In the note, replace 'procedures identified' by 'procedure identified'.

8.10.3.4 example no. 20

Replace

`[a, b, f(b), f(a)]`

by

`[a, b, f(a), f(b)]`

8.13.3.4 put_byte/1

Replace

```
put_byte(84).
  If the current output stream contains
  [..., 113,119,101,114]
  Succeeds, and leaves that stream
  [..., 113,119,101,114,116]

put_byte(st_o, 84).
  If the stream associated with st_o contains
  [..., 113,119,101,114]
  Succeeds, and leaves that stream
  [..., 113,119,101,114,116]
```

by

```
put_byte(84).
  If the current output stream contains
  [..., 113,119,101,114]
  Succeeds, and leaves that stream
  [..., 113,119,101,114,84]

put_byte(st_o, 116).
  If the stream associated with st_o contains
  [..., 113,119,101,114]
  Succeeds, and leaves that stream
  [..., 113,119,101,114,116]
```

8.14.1.4 examples no. 2 and 3

Replace

```
st_o
```

by

```
st_i
```

8.14.1.4 example no. 6 (last)

Replace

The current input stream is left with position past-end-of-stream.

by

The current input stream is left in an undefined state.

(Cf. 8.14.1.1 NOTE 2)

8.14.4.1 d)

Replace

Chooses a member of \$Set_Op\$ and the goal succeeds

by

Chooses a member of \$Set_Op\$, unifies it with (Priority, Op_specifier, Operator), and the goal succeeds

8.16.4 atom_chars/2

The sixth example in 8.16.4.4 is

```
atom_chars('North', ['N' | X]).
  Succeeds, unifying X with
  ['o', 'r', 't', 'h'].
```

but the procedural description does not permit this.

Replace 8.16.4.1(c) by:

c) Else if Atom is an atom whose name is the sequence of characters \$Seq\$ and List unifies with a list L such that every element of L is the one-char atom whose name is the corresponding element of \$Seq\$, then the goal succeeds,

8.16.5 atom_codes/2

The error noted in 8.16.4 implies a similar change in this procedure. Replace 8.16.5.1(c) by:

c) Else if Atom is an atom whose name is the sequence of characters \$Seq\$ and List unifies with a list L such that every element of L is the character code of the corresponding element of \$Seq\$, then the goal succeeds,