

MASSACHUSETTS INSTITUTE OF TECHNOLOGY

PROJECT MAC

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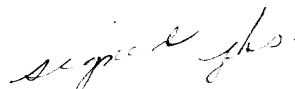
Dear Bob:

Enclosed is a listing of a program which I am using as a programming example for Chapter 4 of the MPM. I decided to provide the example in terms of the version 2 PL/I compiler. In using the compiler, and attempting to provide the MPM reader with an explanation of everything in the output listing, I found three possible bugs:

1. The internal procedure `get_token` is not compiled with a fast call. I can find no reason why.
2. The list of "THE FOLLOWING EXTERNAL OPERATORS ARE USED BY THIS PROGRAM" includes eleven operators not called by the program. These are `cp_bs4`, `cat_bsa`, `move_label_var`, `sign`, `mpfx2`, `pad_cs`, `index_bs`, `cat_cs_co`, `zero_bsa`, `suffix_bs`, and `floor_fx2`. Perhaps they were originally used but the optimizer squeezed them out? In any case the list is less helpful than expected.
3. The variable "mid" is listed in "NAMES DECLARED BY DECLARE STATEMENT BUT NEVER REFERENCED." In fact, a reference occurs on line 80. (I will admit that the reference is fishy, but it is still a reference, isn't it?)

I bring up these points because I am hoping to enshrine this output listing, complete with whatever bugs are in it at the time, sometime later this summer as part of chapter 4 of the MPM, and I wanted to give you a chance to react (and perhaps to decide that you don't care) before I do.

Sincerely yours,



Jérôme H. Saltzer
Associate Professor of
Electrical Engineering

P.S. I have not reported these bugs via any other path.