if read = BEGIN then (compound st {read); plant (DEL)) else
fail (PROGRAM DOES NOT START WITH 'BEGIN') fi
end c of compile program c;
For a complete program this procedure declaration would be
preceded by begin and followed by
iplist ← ['\', ' ', ''], [' ', ' ', ' '];
c this creates the appropriate input conventions c
compile program; enter code (0)
end.

References

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Book review

This book describes itself as a 'Report of a Conference held in Hanover on 28-30 March 1974'. The conference comprised five half day sessions, the first and second sessions being further sub-divided into two parts. Each session or part-session is preceded, in the publication, by a summary, written after the conference, of the papers presented in that session and a synopsis of the discussions which took place. This is a method quite different from that used elsewhere, wherein the discussion is usually presented at the end of each session and then usually it takes the form of speakers being identified together with their questions, answers, or comments.

The 'Table of Contents' lists the papers in presentation order, within the five half-day subdivisions. This is then followed by the list of authors in alphabetical order with their institutions. From this one sees that the only speakers from outside Germany came from Vienna (two), Milan (one) and Chicago (one).

In his summary of Part I of the first half day, which is devoted to 'Information and Communication', Professor Koeppe says that the papers of the first morning were 'characterised by a certain thoughtfulness, a pause for thinking, after perhaps many years of work with too great a technological orientation'. This phraseology succinctly covers the papers in that section as they are both devoted to abstract ideas in communication and information flow, the second being in the area of project management. The second Part of the first half day continues the theme and deals with the use of cybernetics in (a) MANWARE for hospital information systems; (b) the development of social-psychological criteria for the introduction of EDP into laboratory procedures; (c) the Hanover Medical System and (d) laboratory data processing, again at the Hanover Medical High School. The only quantitative information occurs in four consecutive pages and is concerned with data storage in the Hanover Medical System. The programming for the system was done in PL/I and the first patient was processed in July 1971.

In the second half-day, practical applications were considered. These included (a) the use of an LP model in a Diagnostik Clinic—found to be severely limited because of an inability to solve the mixed-integer type of LP problem; (b) a critical analysis of the advantages of the use of bar-code in a hospital situation (they are still not convinced of any advantage and claim further work needs to be done; this contrasts with our own situation where bar-code readers are successfully and advantageously used at the North Staffordshire General Hospital at Stoke); (c) monitoring and control of a laboratory system (this paper has no references attached and seems to be describing their progress: it would appear from the description that they are following the lines of the work done at the Queen Elizabeth Hospital, Birmingham, and University College, some ten years ago); (d) identification of patient specimens in laboratories. The technique is to use magnetised plastic rings which encircle the specimen tubes, the rings carrying 18 bits of information and being read automatically.

The next half day was perhaps the most interesting from a practical point of view as it dealt with patient monitoring and patient measurement. The first paper reminds us of the principle of electrode potential and gives a reference list of values for 19 elements. The third paper is concerned with handling false alarm situations in an intensive care unit. Great emphasis is placed on detecting exactly where the signals can become disrupted. The author measures heart-rate, respiratory-rate, and temperature but does not attempt to use the 'two-out-of-three' system such as was developed by Dr. Stewart at Wigan several years earlier and which is now commercially available. They do however store patient data for the previous 24 hours for retrieval on varying time axes, as per the Thoracic Clinic system at the Karolinska. The paper which follows describes an attempt to build a servo system for regulation of drip infusion by monitoring urine output. They conclude that a digital computer is essential as the analogue will not cope. The last paper in that session deals with the use of the VDU (even in colour) as a device for display of tomographic type information. It points out that the colour can be distracting in certain cases and resorts to the grey scale where necessary.

The remaining two sessions were devoted to (a) quality control in the biochemistry laboratory, and (b) text processing.

Only eleven of the twenty-six papers presented give lists of references. Of these, only five contain any reference to works published in English, and whilst mention is made of various English speaking conferences, sadly there is no mention of any of the many held in the UK. This book, which contains several typographical errors, shows how the Germans are progressing slowly but with assured confidence at each step. They would obviously have learnt a good deal from the papers presented at MEDINFO 74 which followed their conference. The book does credit to the two editors, Professor Peter Reichertz and Dr. Gabriele Holthoff both from the Medical High School at Hanover.

B. RICHARDS (Manchester)

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