

IMPLICATIONS OF PROCESSES.

We have introduced the name "process" to denote the activity of a computer, and to give us a way of discussing the activity in an orderly way. The processes are the very essence of our use of computers, as they are direct representations of the core task of "obeying instructions as requested". Our discussion of processes has brought out a number of points which are significant in the design of the system, and here we summarise these issues.

- First, it is necessary that the processor should have access to the programme instructions while the process is active.
- There must be facilities to provide storage for temporary use while a programme is running. The demands will be for arbitrary amounts of storage, and will be made at arbitrary times during the life of the process; it must be possible for them to be linked together somehow. All programmes need similar services, so it is appropriate to provide them in the operating system.
- Storage allocated for temporary use must be retrieved by the system when it is no longer required.
- A structure which we have called the process table will be necessary in order to keep track of the active processes and their current activities.