Construction of a small two-story house involves the tasks listed in the following table. The table also shows the estimated duration of each task in days and the tasks that must complete before it can begin.

|  |  |  |  |
| --- | --- | --- | --- |
| Activity | Duration  (in days) | Immediate  Predecessors |  |
| FD. Foundation | 8 | - |  |
| CS. Concrete Slab | 5 | FD |  |
| 1B. First Bearing Walls | 3 | CS |  |
| 1I. First internal walls | 4 | CS |  |
| 1F. First finishing | 12 | 1B,1I |  |
| 2FL. Second floor | 3 | 1B |  |
| 2B Second Bearing Walls | 4 | 2FL |  |
| 2I. Second internal walls | 5 | 2FL |  |
| 2F Second finishing | 10 | 2B,2I, RF |  |
| RF.Roof | 1 | 2B |  |

To effectively administer the product development, the manager of the project would like to know the following:

1. Construct a CPM project network
2. Formulate the LP to solve the CPM