

Dynamic Distillery

You have been put in charge of launching Dynamic Distillery's new bourbon whiskey. There are 4 nonoverlapping phases: research, development, manufacturing system design, and initial production and distribution. Each phase can be conducted at two speeds: normal or priority. The times required (in months) to complete each phase at the two speeds are:

Level	Research	Development	Manufacturing System Design	Initial Production and Distribution
Normal	4	3	5	2
Priority	2	2	3	1

The costs (in millions of \$) of completing each phase at the two speeds are:

Level	Research	Development	Manufacturing System Design	Initial Production and Distribution
Normal	2	2	3	1
Priority	3	3	4	2

You have been given \$10 million dollars to execute the launch as quickly as possible. Formulate this problem as a dynamic program by giving its shortest/longest path representation.