

- 直接给出解:  $x_i, u_i$  分别代表第*i*年投入的A,B两种产品的生产:  
 $x_1 = 1000, x_2 = 900, x_3 = 0, x_4 = 0, x_5 = 0$   
 $u_1 = 0, u_2 = 0, u_3 = 810, u_4 = 648, u_5 = 518.4$
- 直接给出解( $x_i = j$ 代表第*i*个人完成第*j*个工作), 代码见Homework2.m  
 解: $x_1 = 2, x_2 = 1, x_3 = 4, x_4 = 3$
- 直接给出解( $x_i = j$ 表示 $E_i$ 种零件*j*个), 代码详见Homework3.m  
 解: $x_1 = 1, x_2 = 1, x_3 = 3, maxvalue = 1.2000$
- 直接给出解( $x_i, u_i$ 表示第*i*年剩余的机器数, 应该投入生产A产品的个数):  
 解 $x_1 = 100, u_1 = 0, x_2 = 65, u_2 = 0, u_3 = x_3 = 22.75, maxvalue = 7676.25$
- 直接给出方案: 代码详见Homework5.m  
 Steps of cross river is 11  

此岸	彼岸
Step 1 is ( 3, 3) -> ( 3, 1)	( 0, 0) -> ( 0, 2)
Step 2 is ( 3, 1) -> ( 3, 2)	( 0, 2) -> ( 0, 1)
Step 3 is ( 3, 2) -> ( 3, 0)	( 0, 1) -> ( 0, 3)
Step 4 is ( 3, 0) -> ( 3, 1)	( 0, 3) -> ( 0, 2)
Step 5 is ( 3, 1) -> ( 1, 1)	( 0, 2) -> ( 2, 2)
Step 6 is ( 1, 1) -> ( 2, 2)	( 2, 2) -> ( 1, 1)
Step 7 is ( 2, 2) -> ( 0, 2)	( 1, 1) -> ( 3, 1)
Step 8 is ( 0, 2) -> ( 0, 3)	( 3, 1) -> ( 3, 0)
Step 9 is ( 0, 3) -> ( 0, 1)	( 3, 0) -> ( 3, 2)
Step 10 is ( 0, 1) -> ( 0, 2)	( 3, 2) -> ( 3, 1)
Step 11 is ( 0, 2) -> ( 0, 0)	( 3, 1) -> ( 3, 3)
- 最短的时间: 43  
 最优的顺序: 4 1 3 2 5 6