Please note:

(1) You may work together on homework, but you must write up your own solutions individually. In particular, you must write your own code, spreadsheets, etc.

(2) You must acknowledge with whom you worked (specify their gradescope.com email addresses). You must also acknowledge any sources you have used beyond the textbook and class material.

(3) When you submit your homework to gradescope.com, you need to put the solutions to different problems on different pages; gradescope.com will ask you to identify which pages correspond to which problems.

(1) 

Solution: Gurobi found $x_1 = 0$, $x_2 = 4.1$, $x_3 = 3.7$, $x_4 = 9.1$, $x_5 = 9.3$, $x_6 = 11.5$ as an optimal solution. The code and solution is in a separate file.

(2) 

Solution: Gurobi found $y_{12} = y_{24} = y_{25} = y_{46} = 0$, $y_{13} = y_{35} = y_{56} = 1$ as an optimal solution. This gives the path 1 $\rightarrow$ 3 $\rightarrow$ 5 $\rightarrow$ 6 as a maximum path in the graph, whose edge weights sum to $3.7 + 5.6 + 2.2 = 11.5$.惩罚