

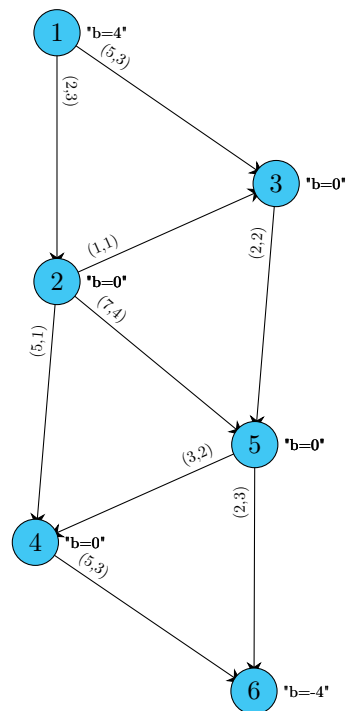
Ricerca Operativa

luca carabini

May 28, 2024

Chapter 1

Cycle Cancellation

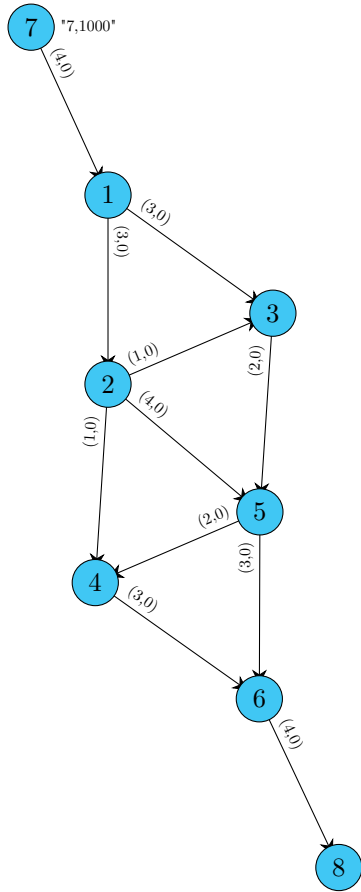


1.1 Flusso ammissibile

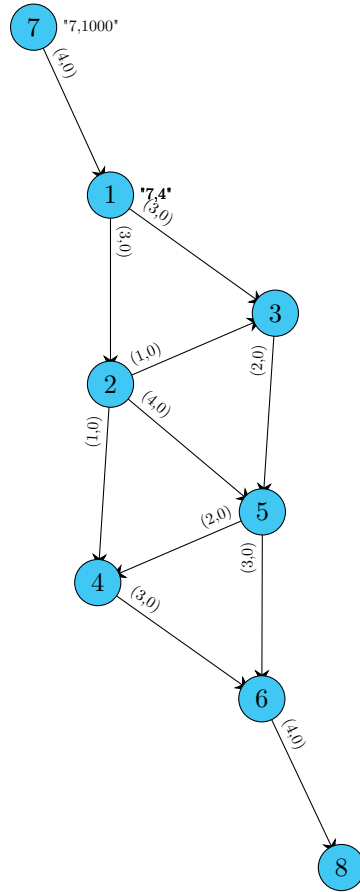
Inizio a creare un Flusso ammissibile

1.1.1 Iterazione 0

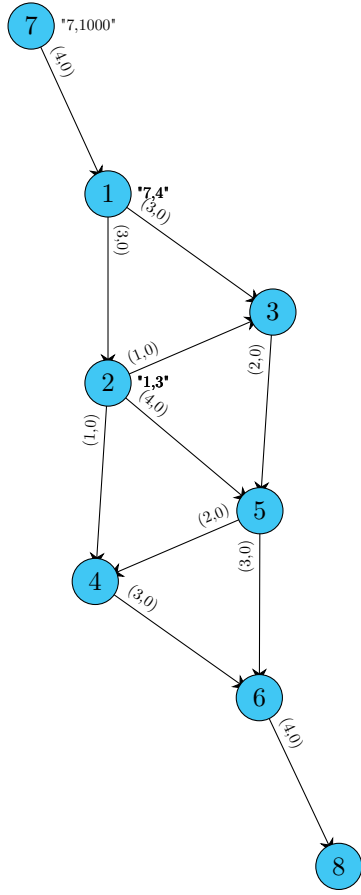
Inizio a etichettare i nodi partendo dal nodo s



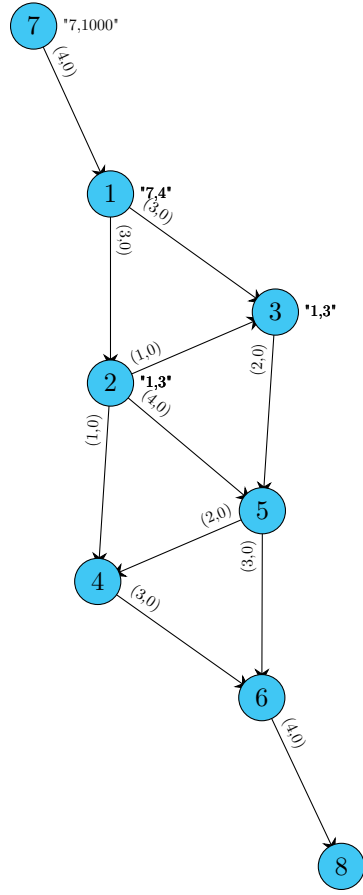
(a) Etichetto 7



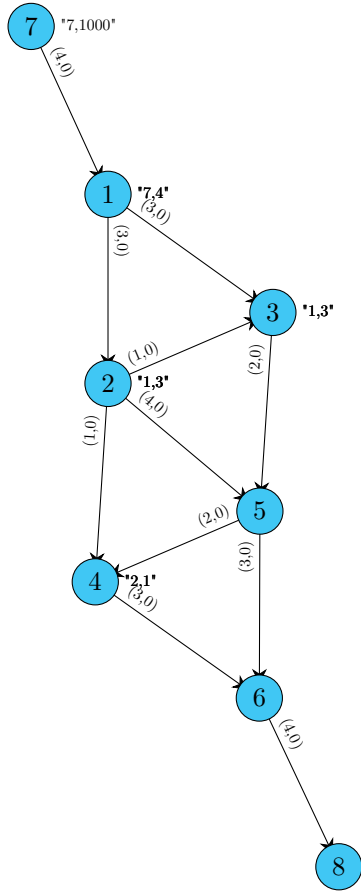
(b) Etichetto 1



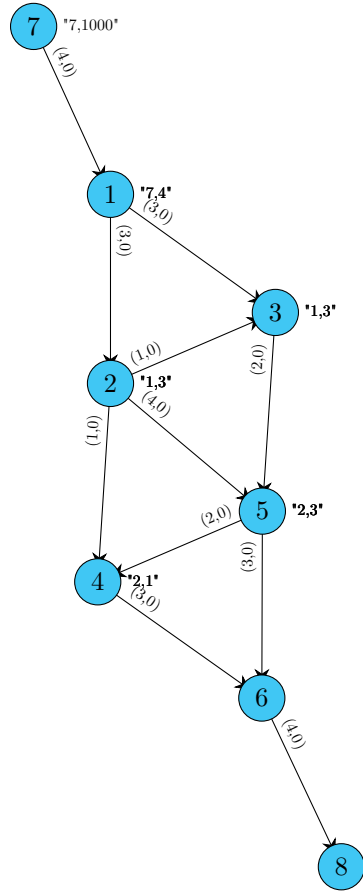
(a) Etichetto 2



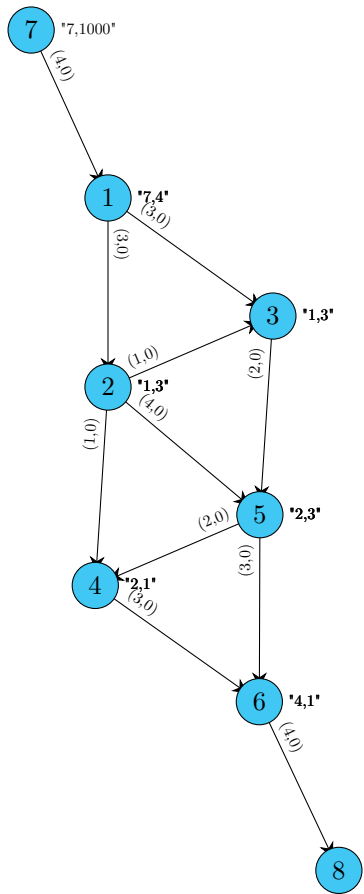
(b) Etichetto 3



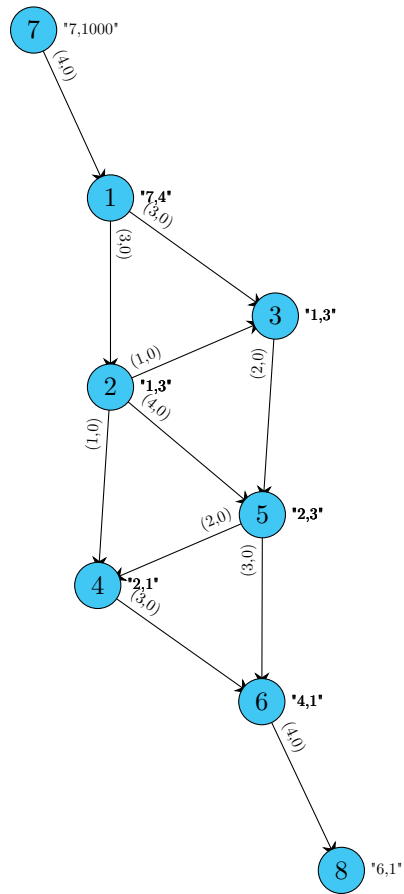
(a) Etichetto 4



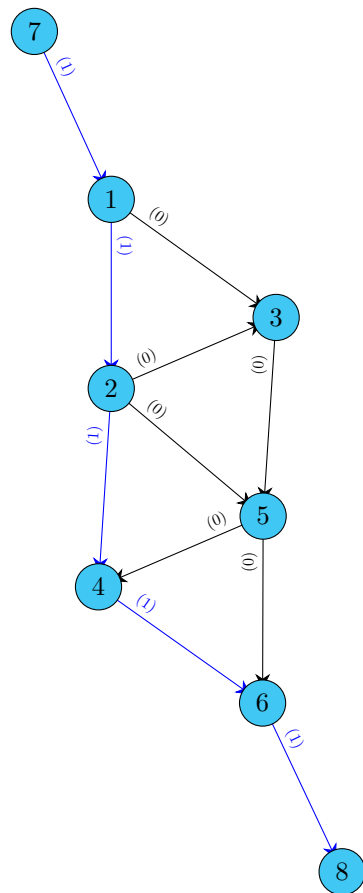
(b) Etichetto 5



(a) Etichetto 6

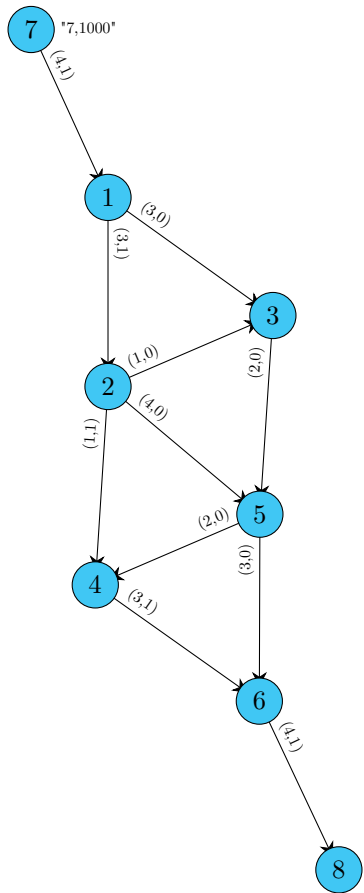


(b) Etichetto 8

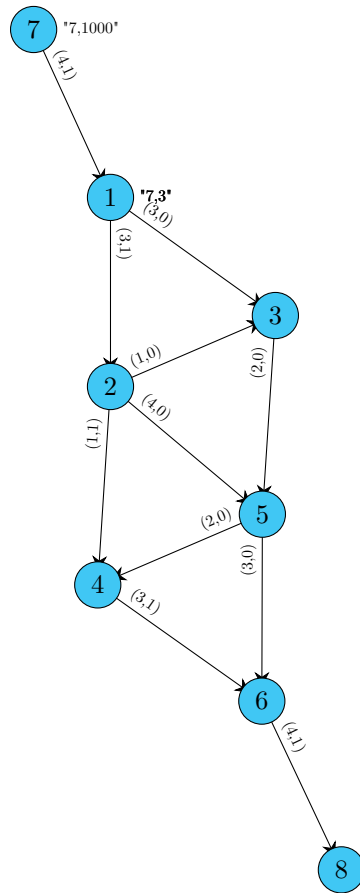


(a) Aumento il flusso di 1

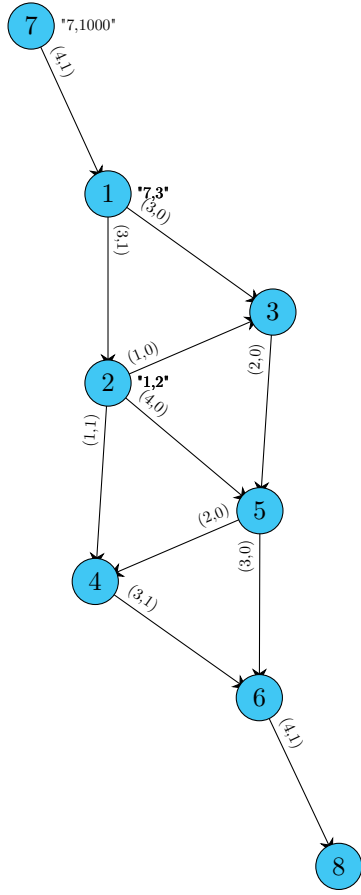
1.1.2 Iterazione 1



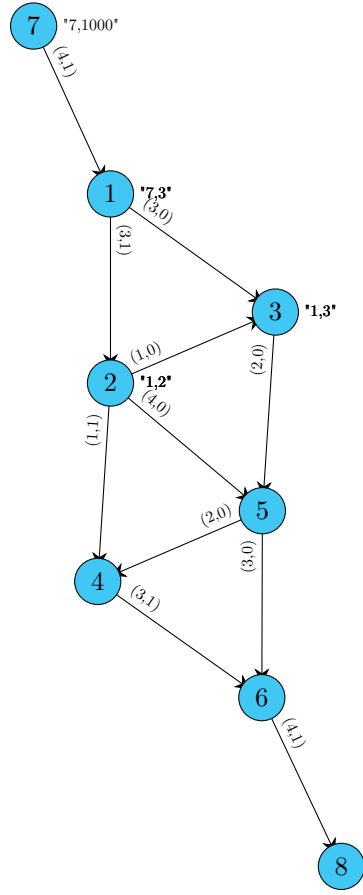
(a) Etichetto 7



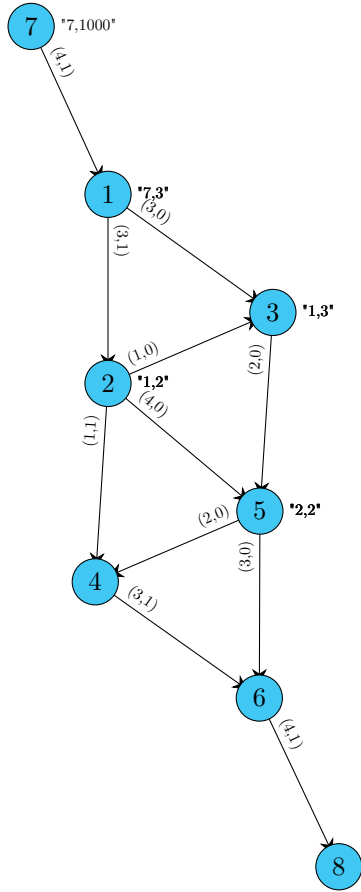
(b) Etichetto 1



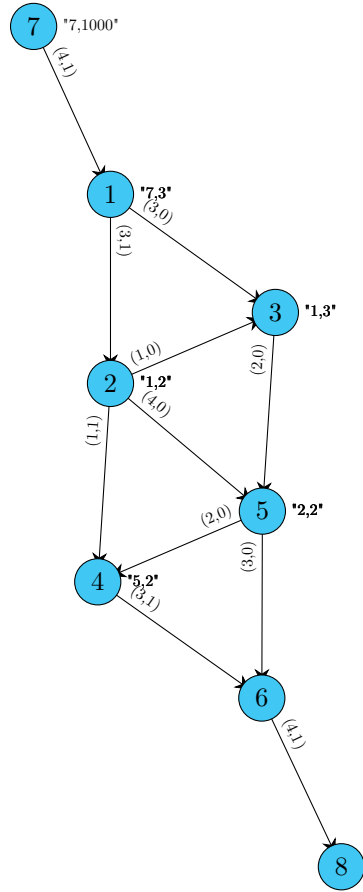
(a) Etichetto 2



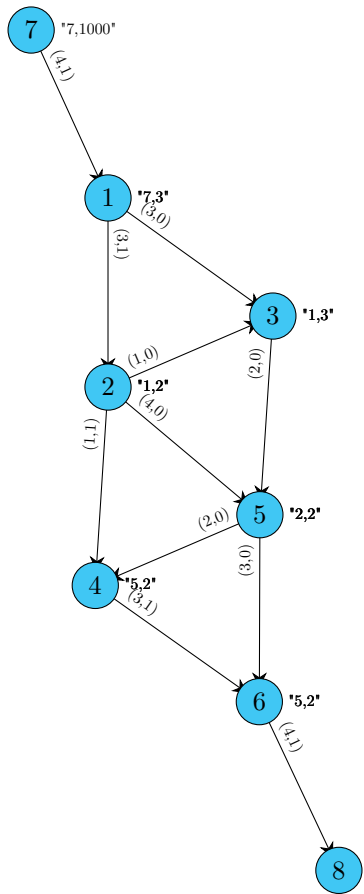
(b) Etichetto 3



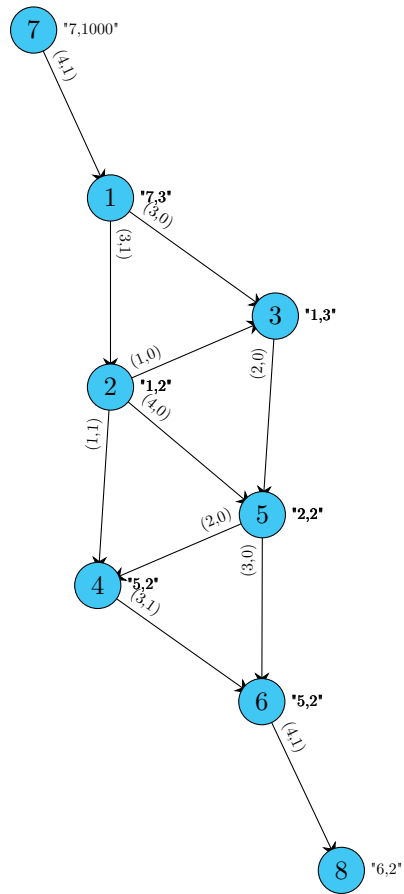
(a) Etichetto 5



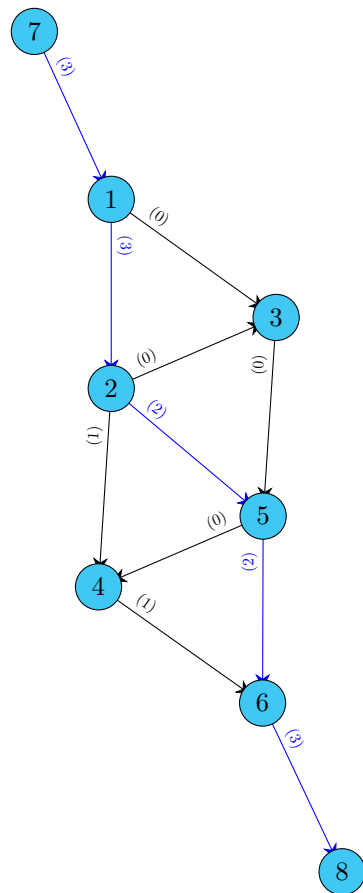
(b) Etichetto 4



(a) Etichetto 6

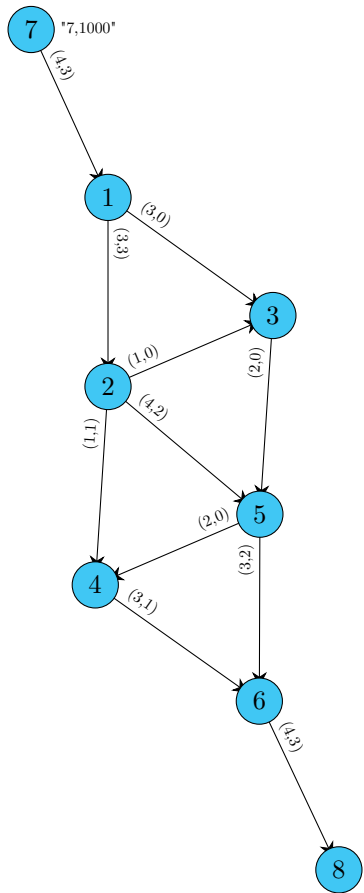


(b) Etichetto 8

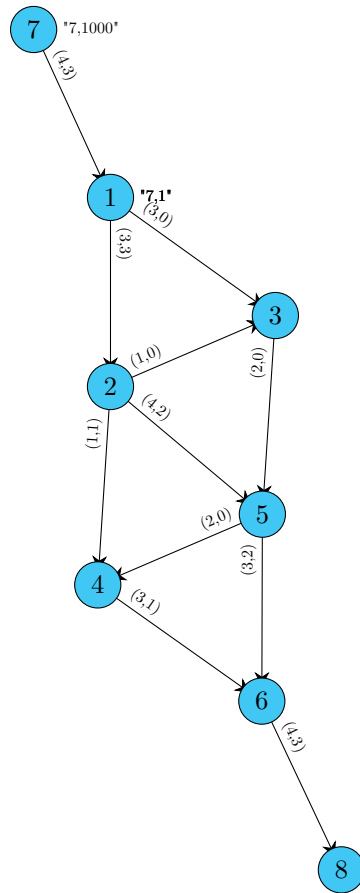


(a) Aumento il flusso di 2

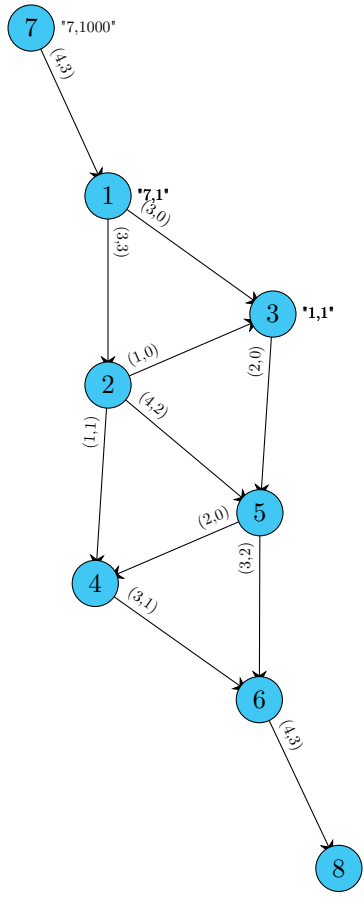
1.1.3 Iterazione 2



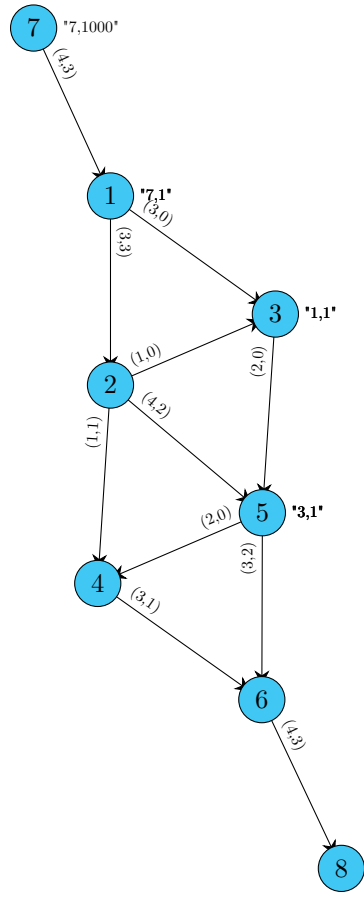
(a) Etichetto 7



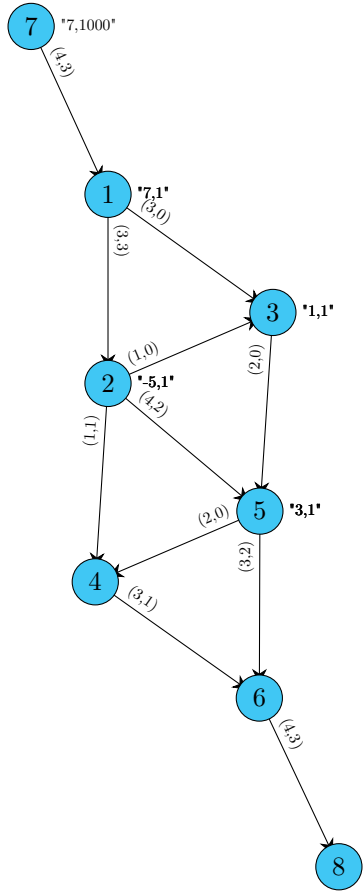
(b) Etichetto 1



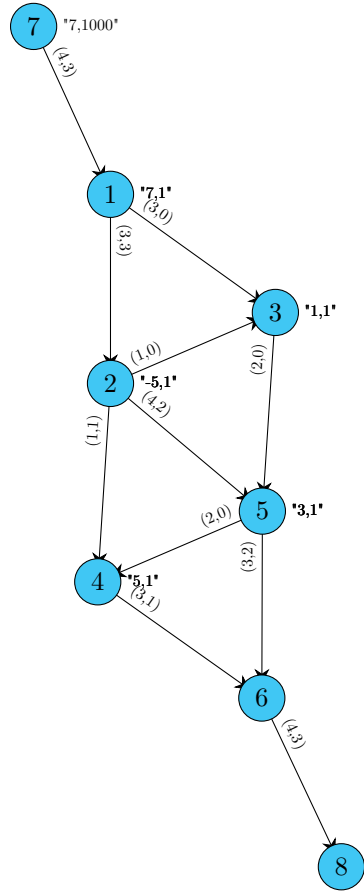
(a) Etichetto 3



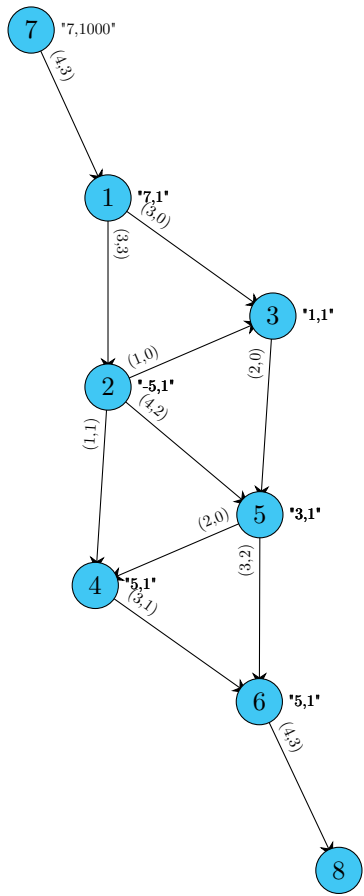
(b) Etichetto 5



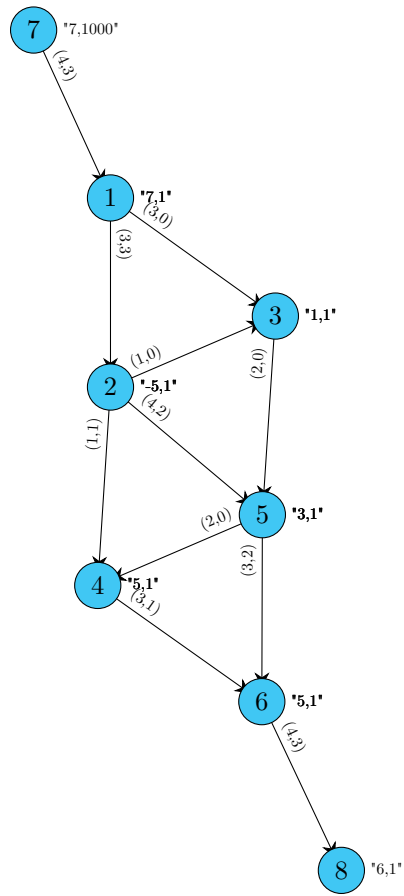
(a) Etichetto 2



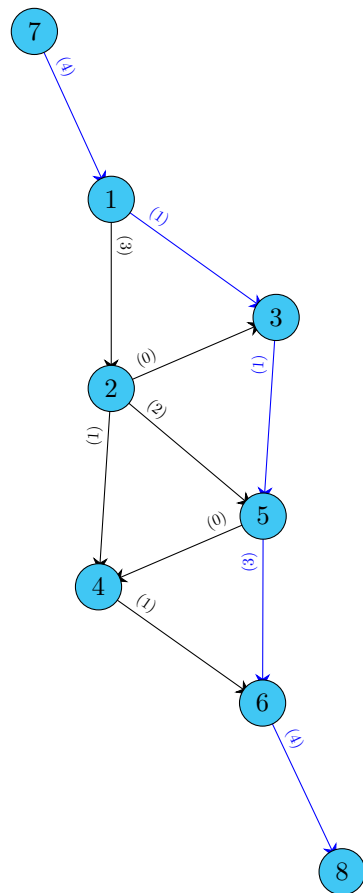
(b) Etichetto 4



(a) Etichetto 6



(b) Etichetto 8



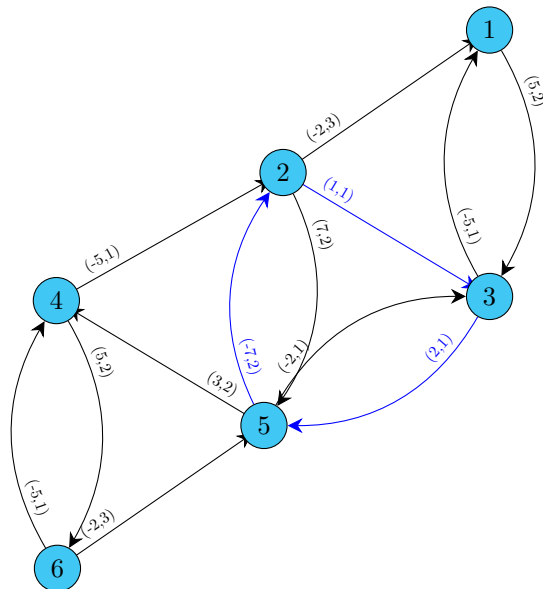
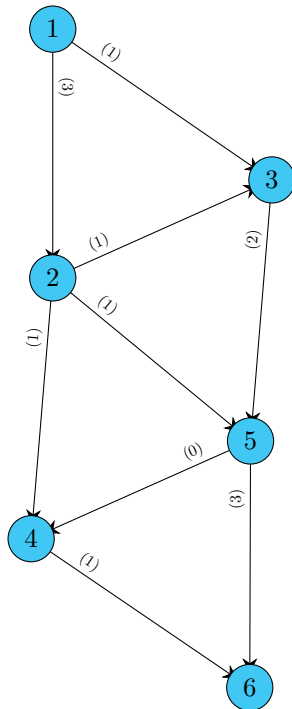
(a) Aumento il flusso di 1

1.1.4 Iterazione 3

1.2 Ricerca di cicli di costo negativo

Inizio la ricerca di cicli di costo negativo

1.2.1 Iterazione 0

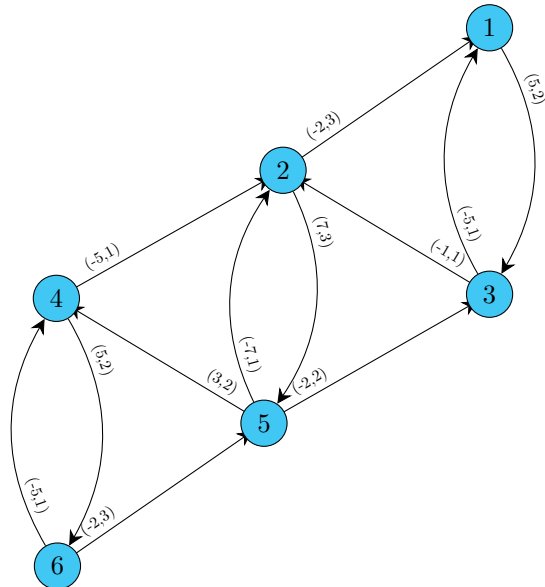
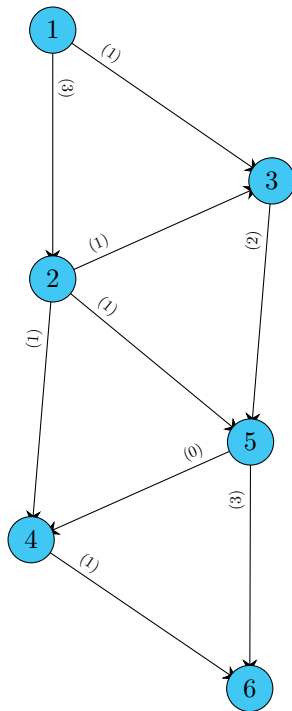


(a) Trovato ciclo di costo negativo

1.3 Ricerca di cicli di costo negativo

Inizio la ricerca di cicli di costo negativo

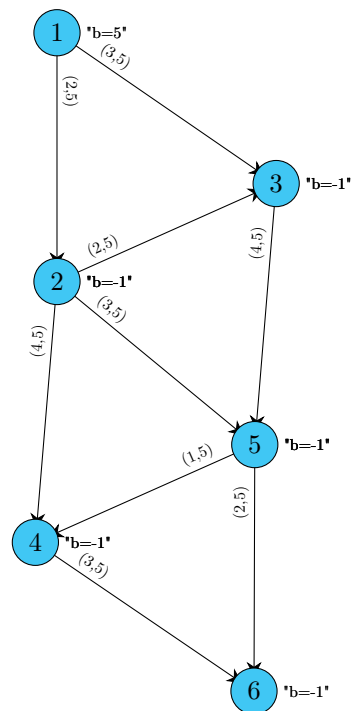
1.3.1 Iterazione 1



(a) Non ci sono più cicli di costo negativo, flusso minimo trovato!

Chapter 2

Cycle Cancellation

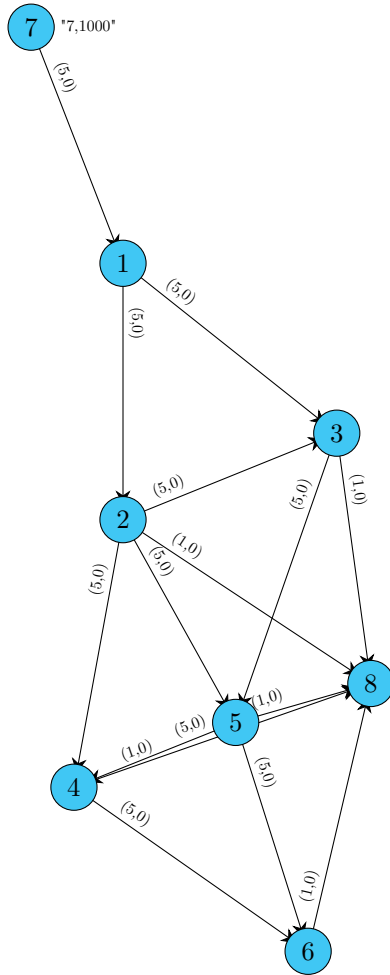


2.1 Flusso ammissibile

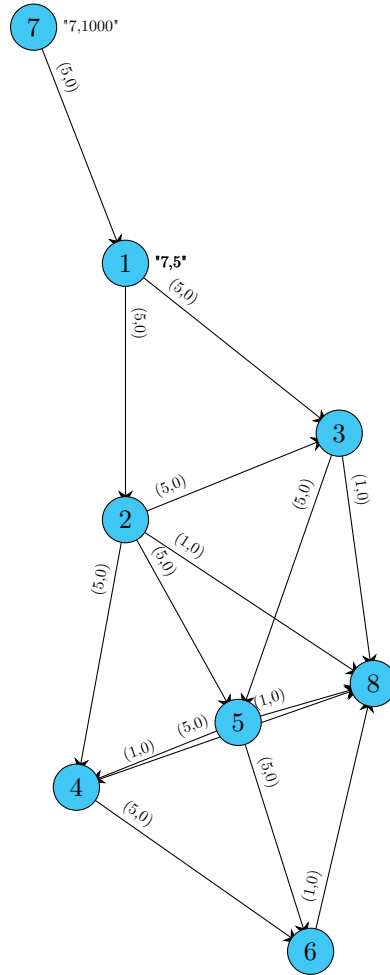
Inizio a creare un Flusso ammissibile

2.1.1 Iterazione 0

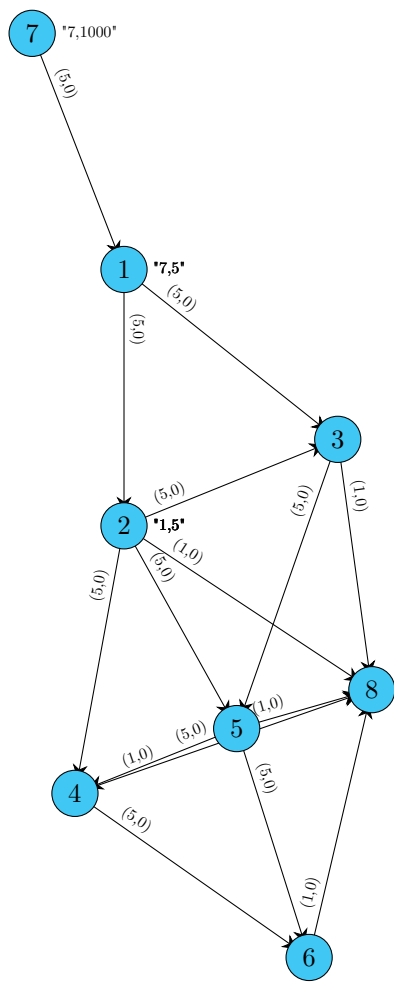
Inizio a etichettare i nodi partendo dal nodo s



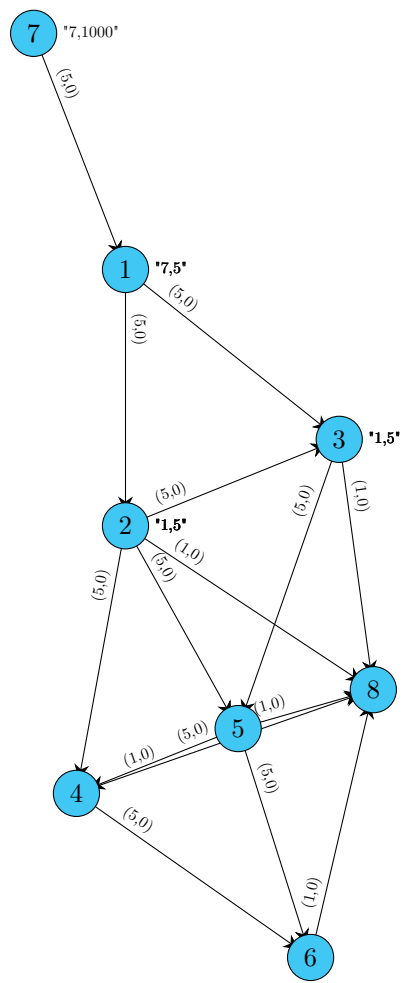
(a) Etichetto 7



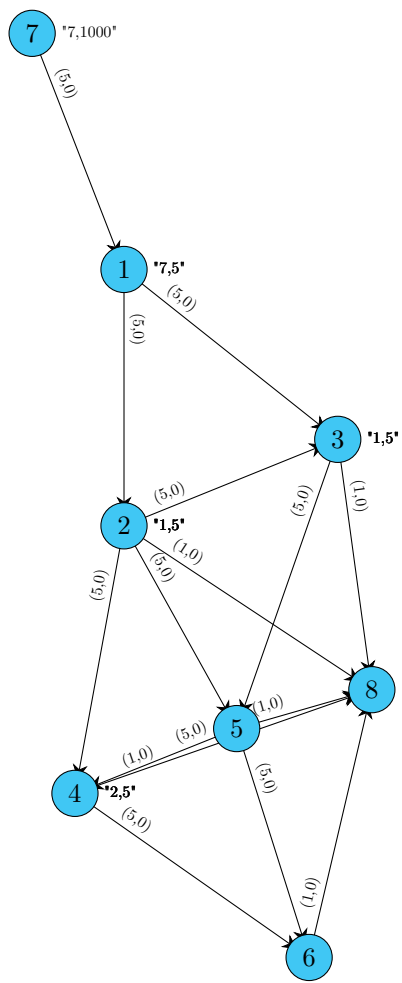
(b) Etichetto 1



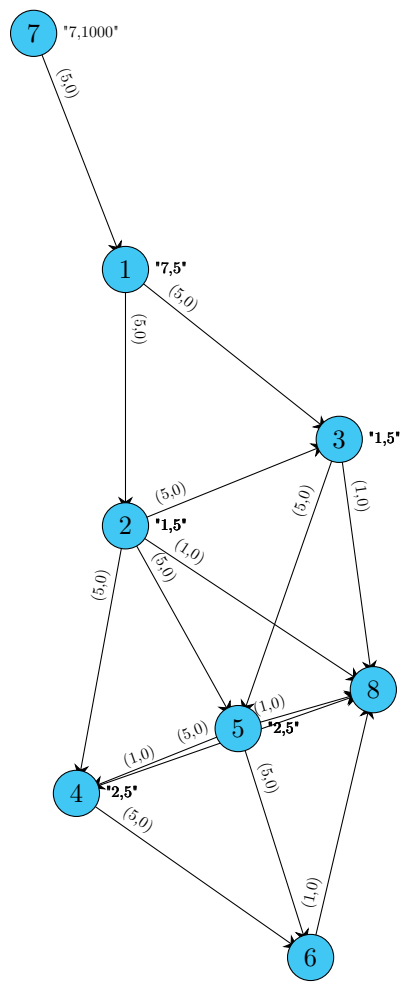
(a) Etichetto 2



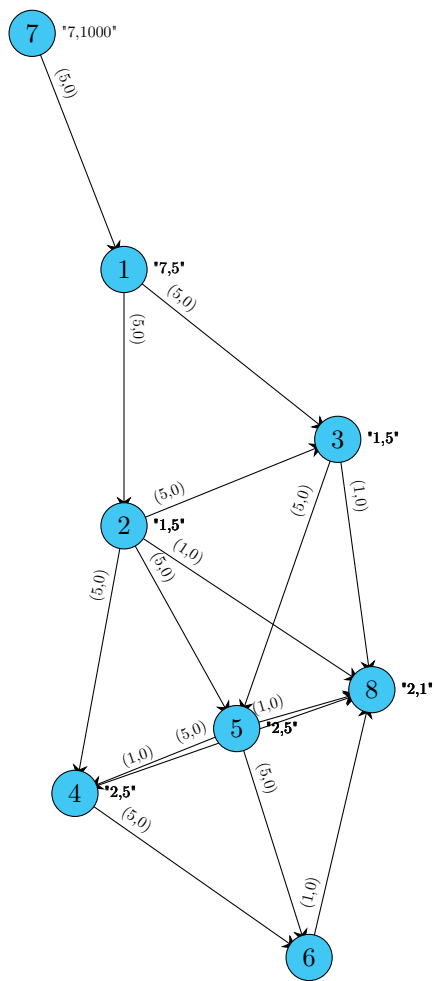
(b) Etichetto 3



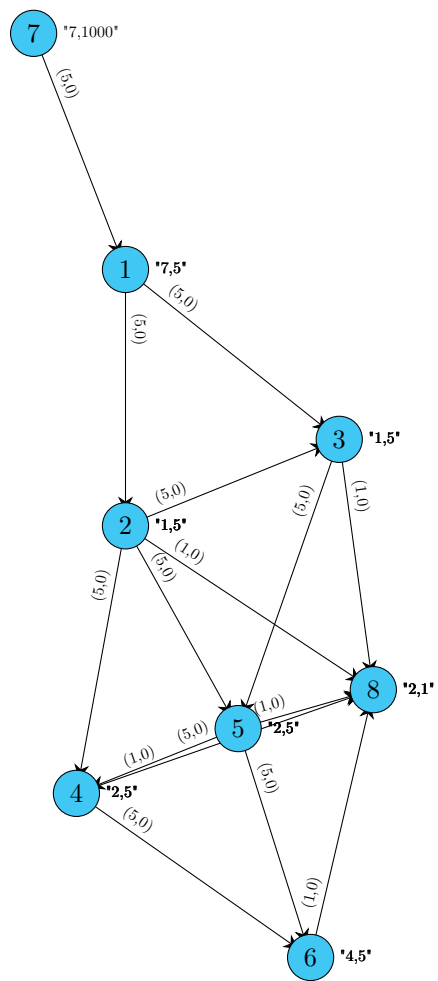
(a) Etichetto 4



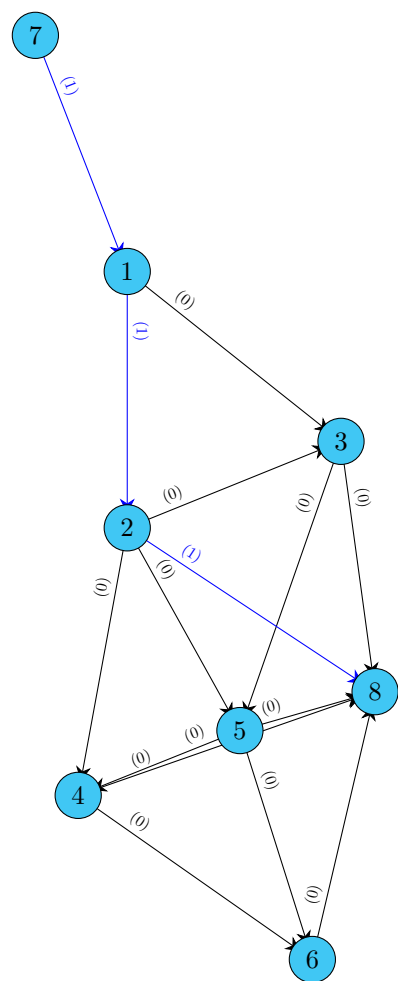
(b) Etichetto 5



(a) Etichetto 8

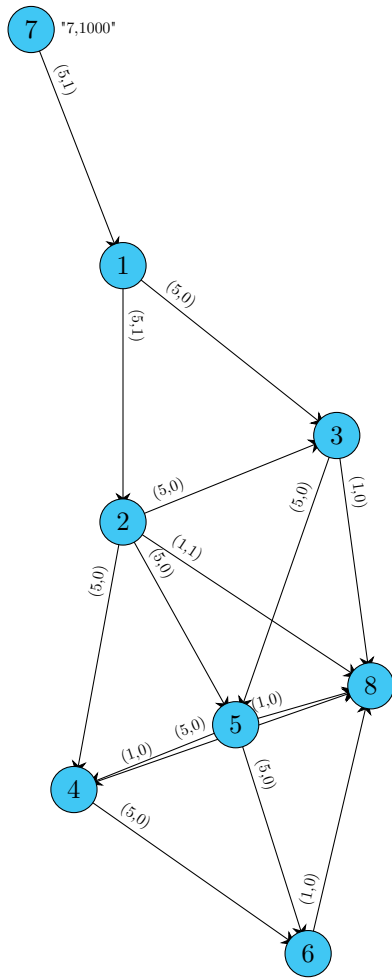


(b) Etichetto 6

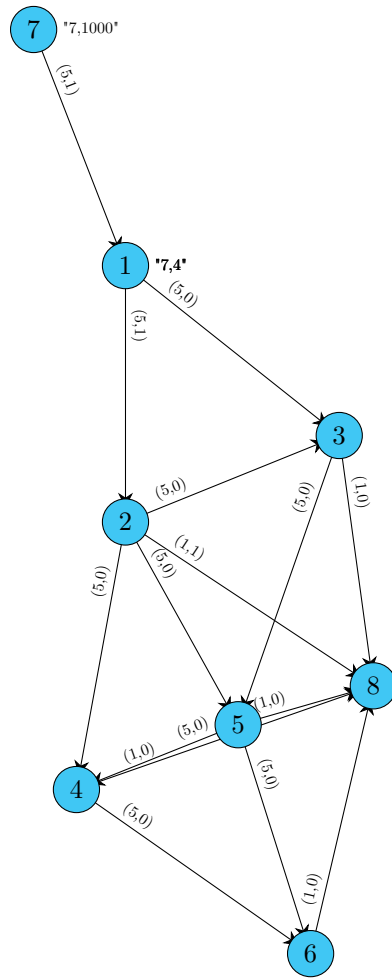


(a) Aumento il flusso di 1

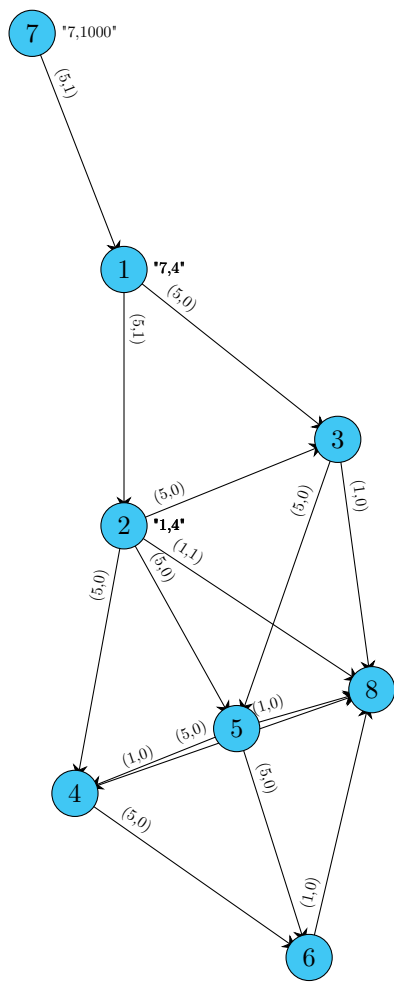
2.1.2 Iterazione 1



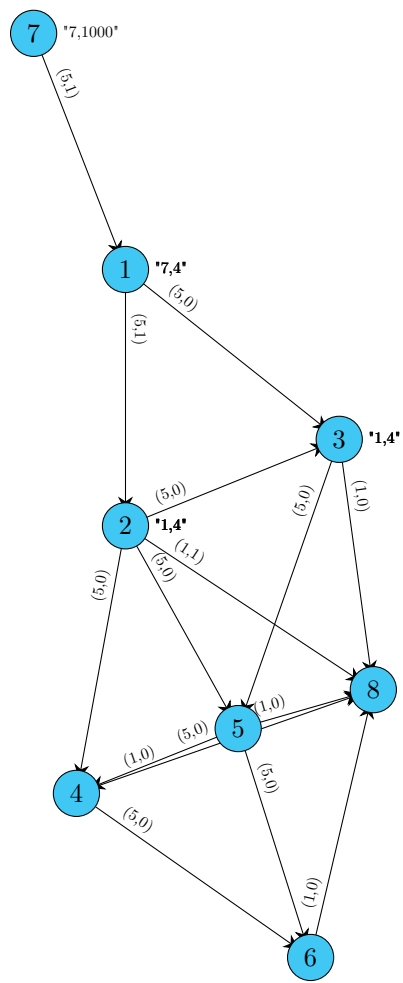
(a) Etichetto 7



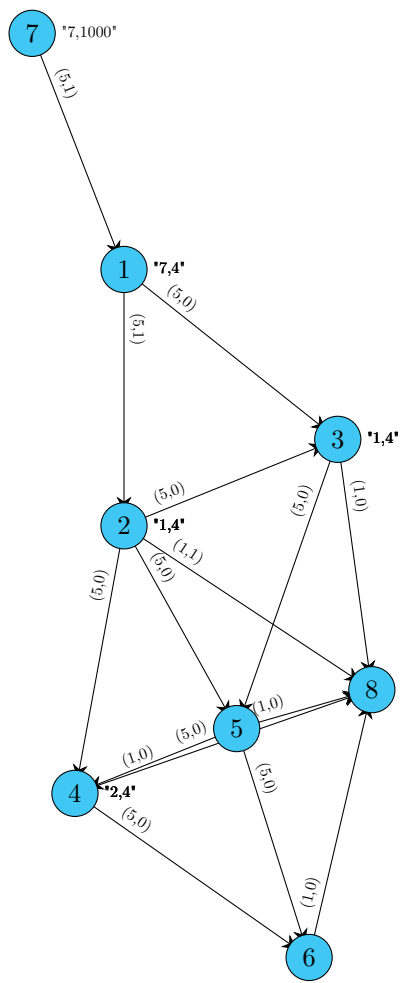
(b) Etichetto 1



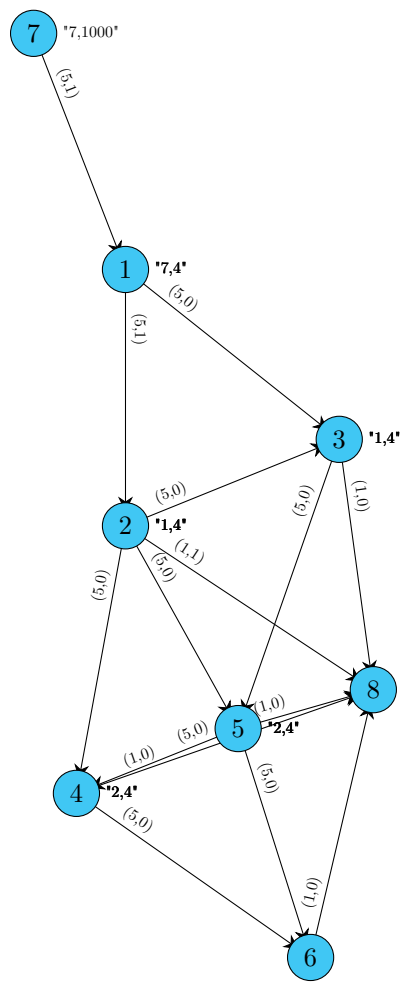
(a) Etichetto 2



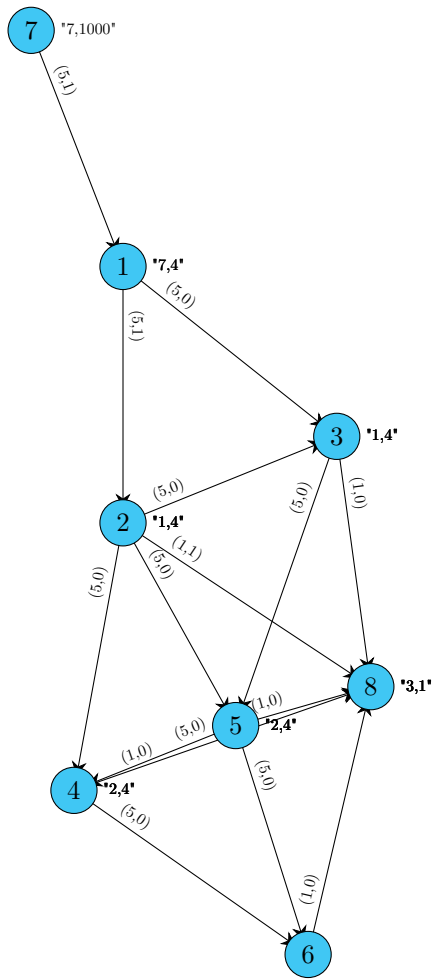
(b) Etichetto 3



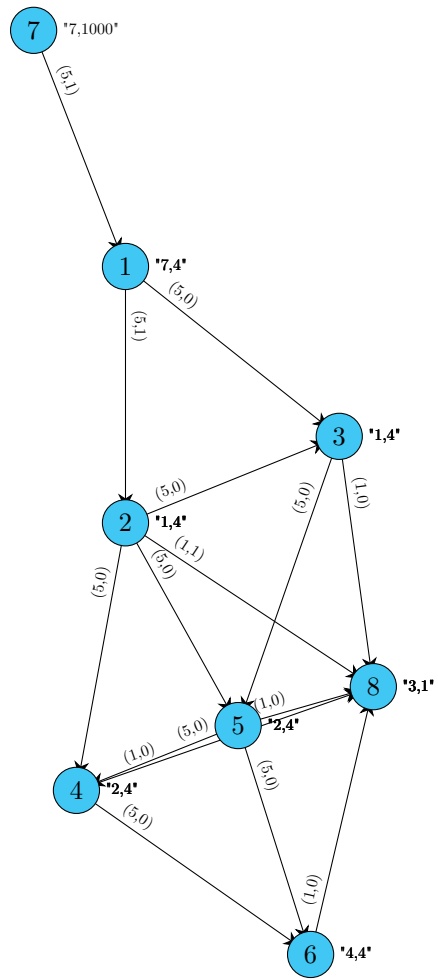
(a) Etichetto 4



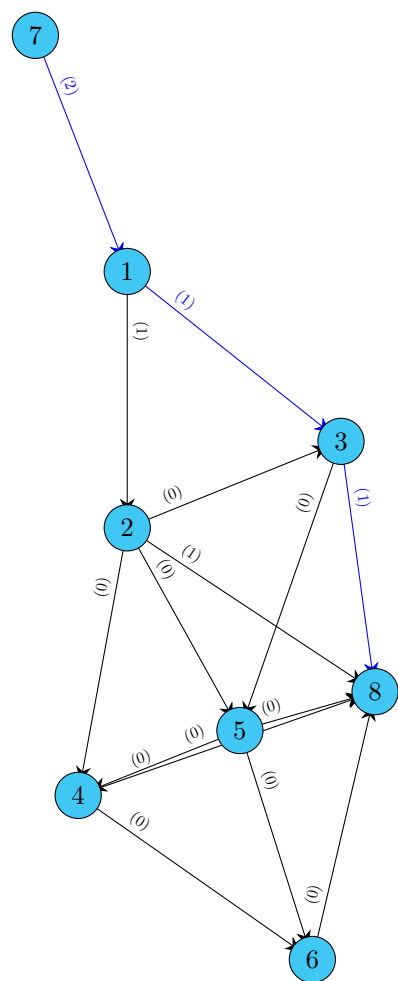
(b) Etichetto 5



(a) Etichetto 8

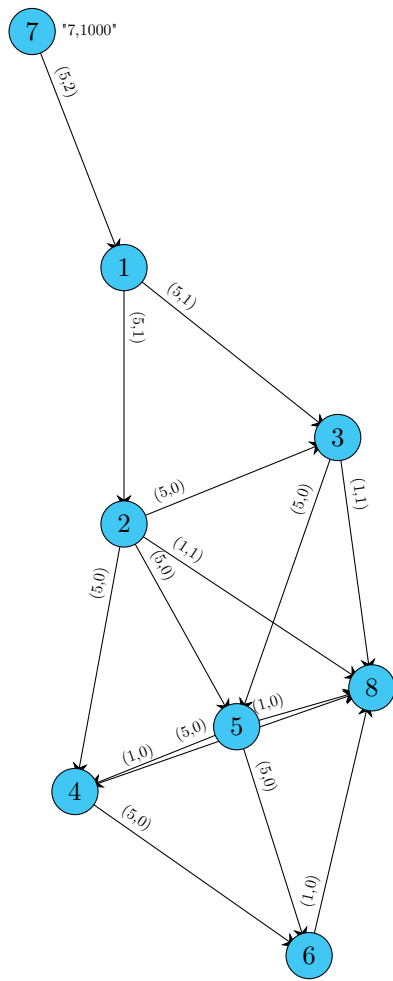


(b) Etichetto 6

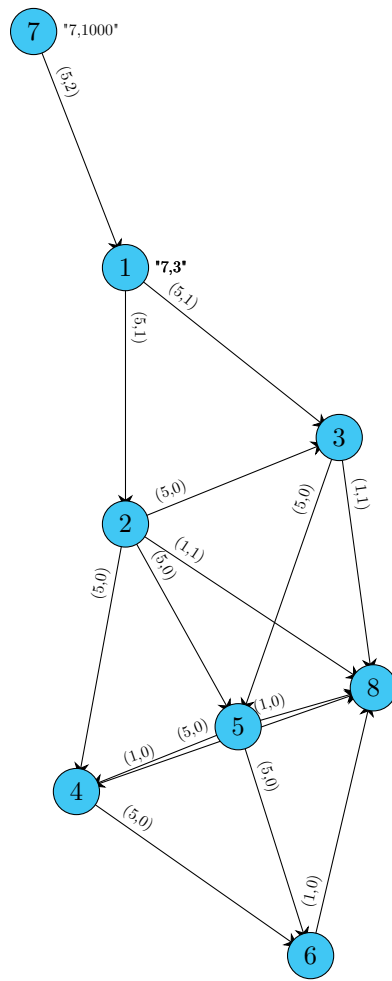


(a) Aumento il flusso di 1

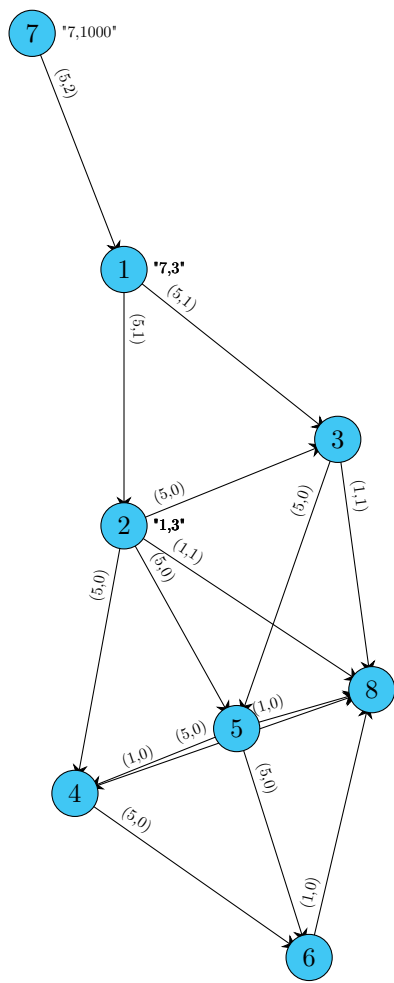
2.1.3 Iterazione 2



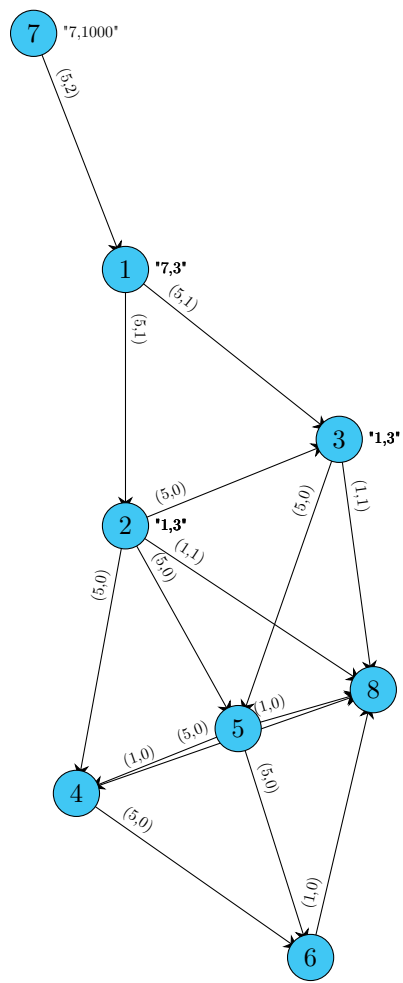
(a) Etichetto 7



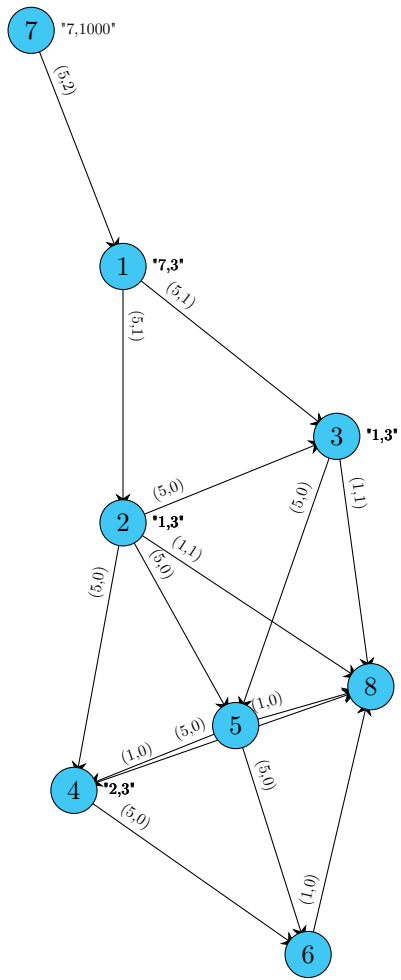
(b) Etichetto 1



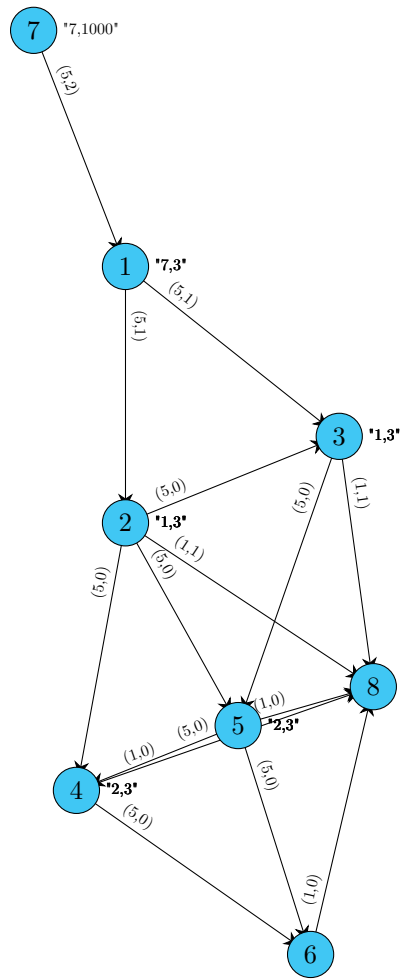
(a) Etichetto 2



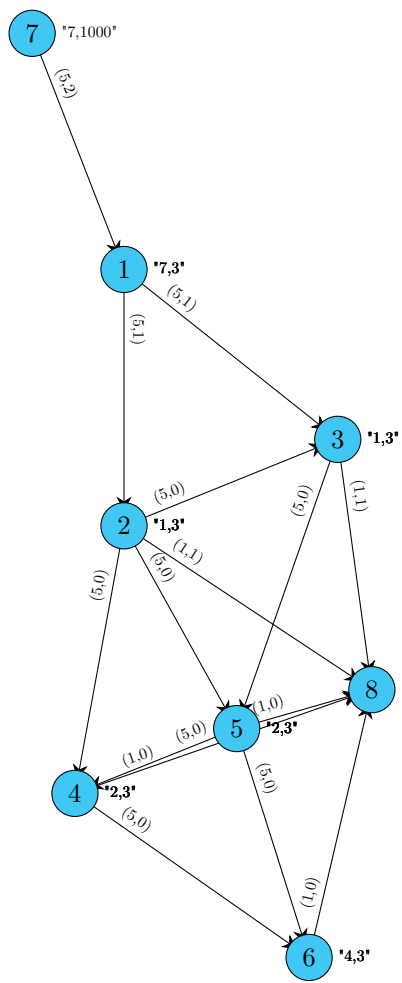
(b) Etichetto 3



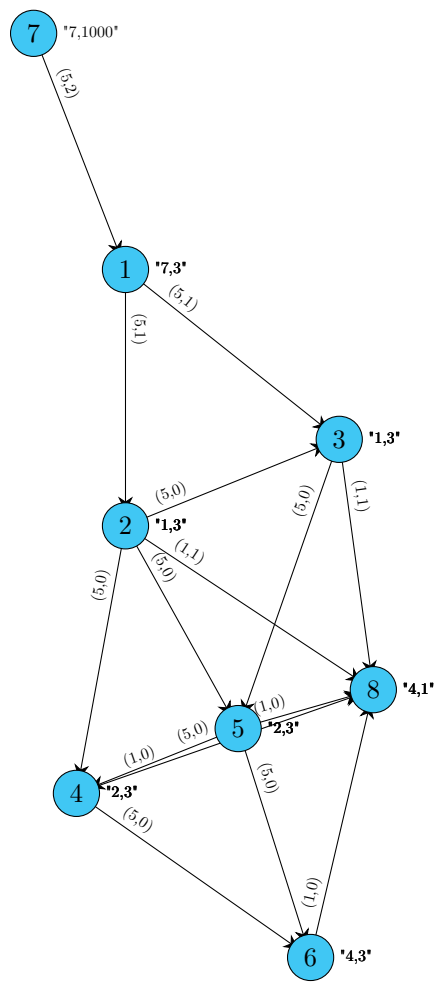
(a) Etichetto 4



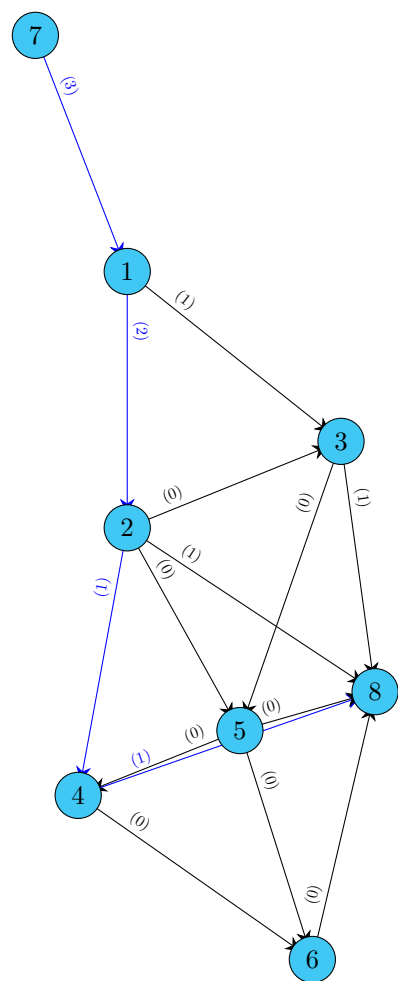
(b) Etichetto 5



(a) Etichetto 6

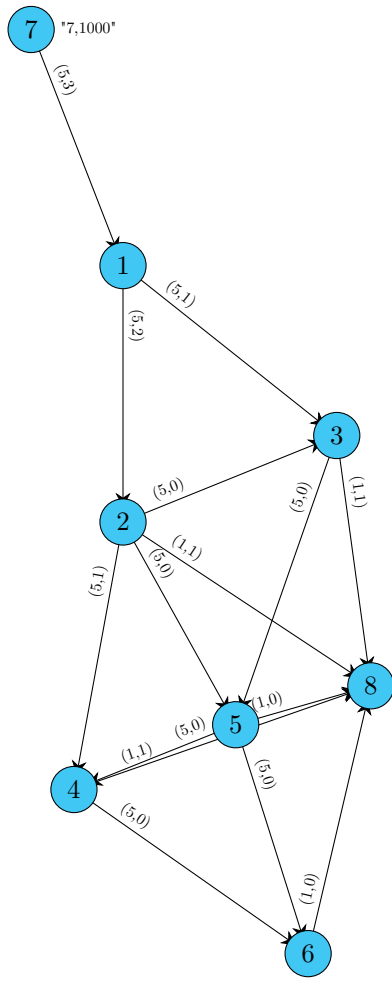


(b) Etichetto 8

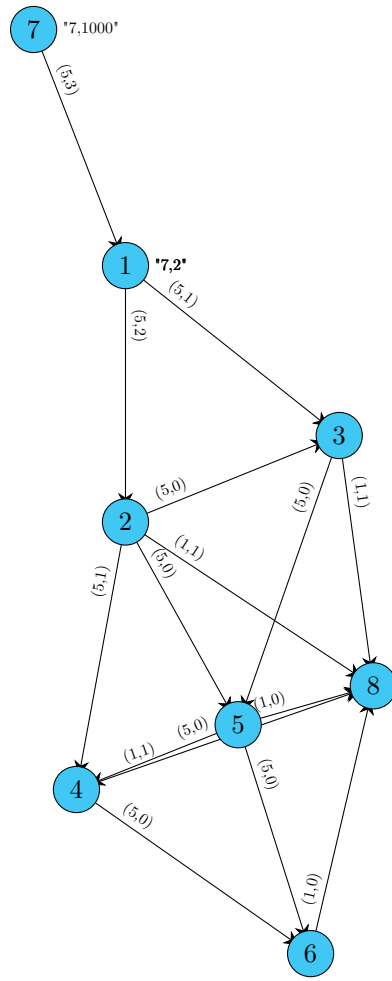


(a) Aumento il flusso di 1

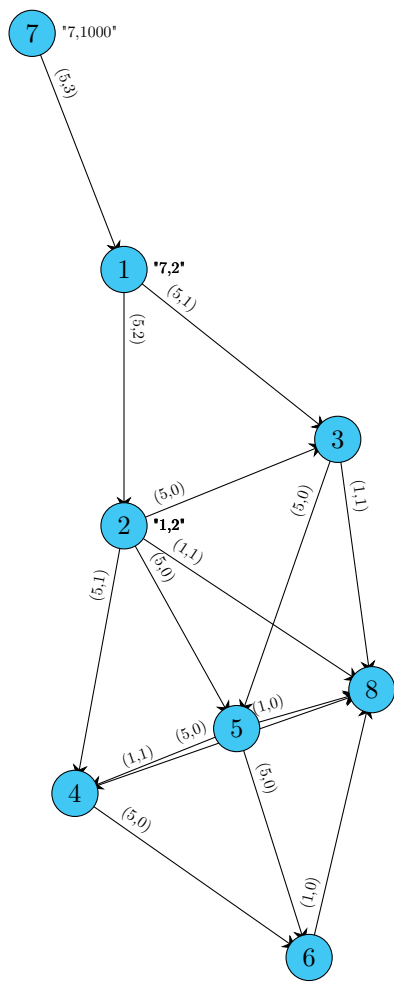
2.1.4 Iterazione 3



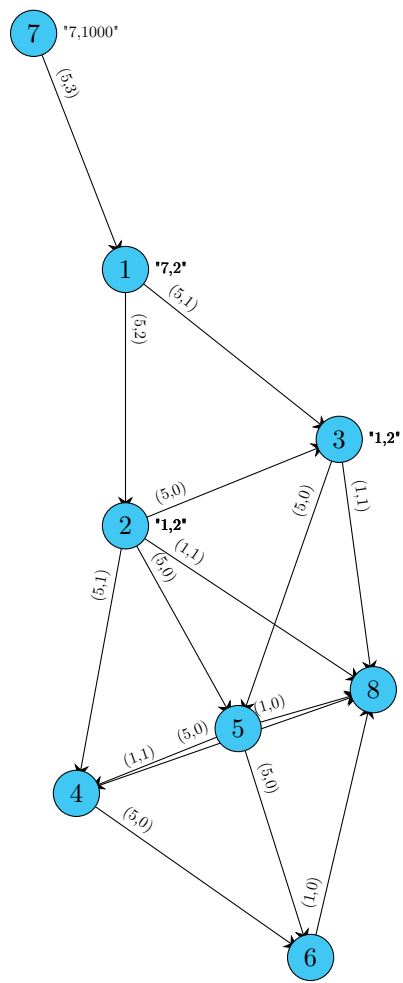
(a) Etichetto 7



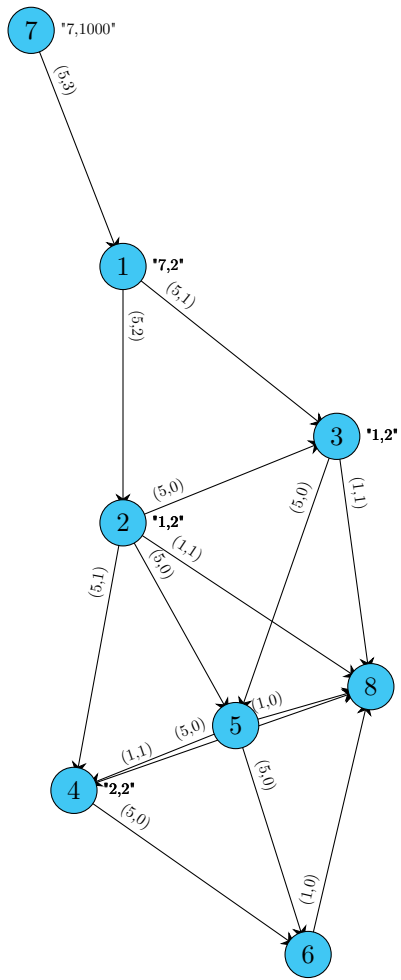
(b) Etichetto 1



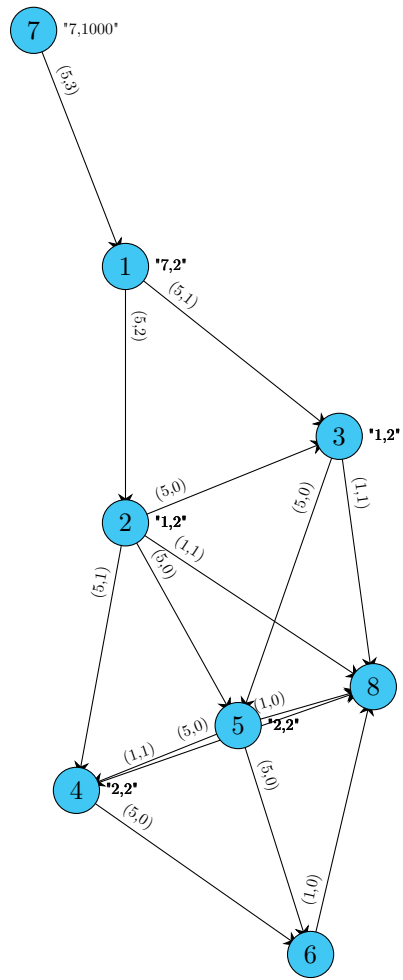
(a) Etichetto 2



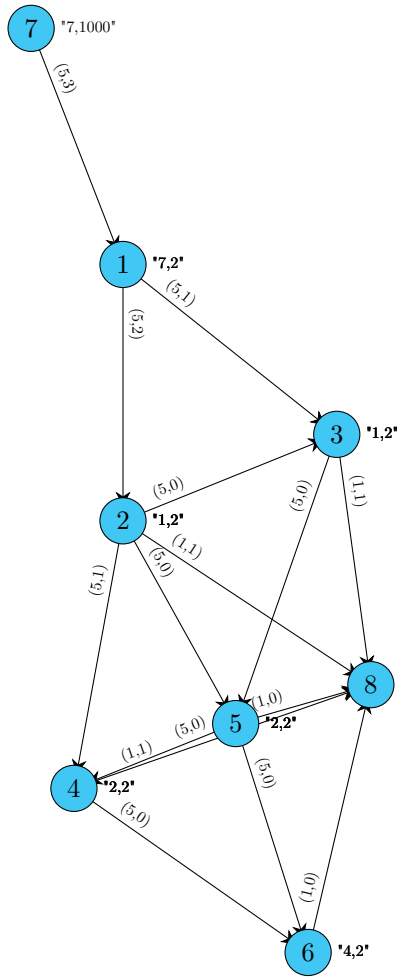
(b) Etichetto 3



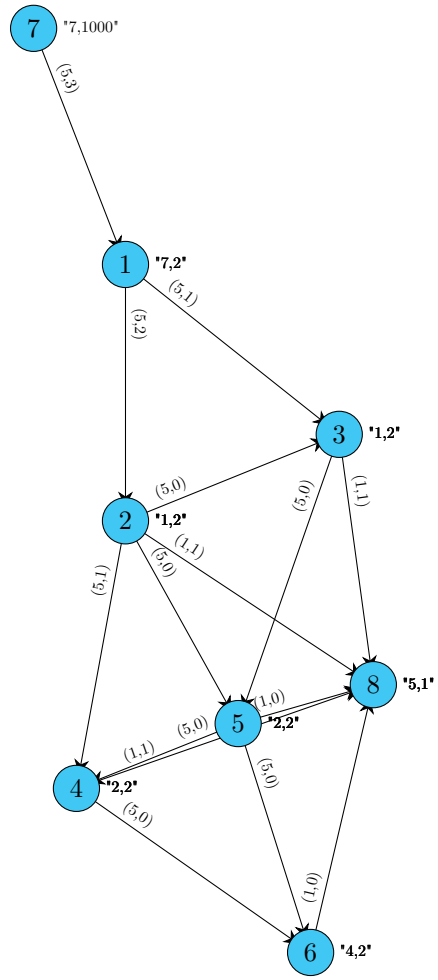
(a) Etichetto 4



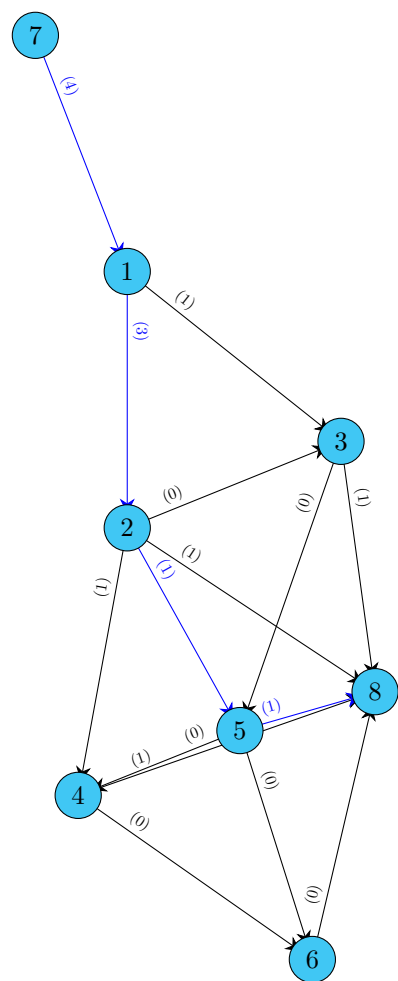
(b) Etichetto 5



(a) Etichetto 6

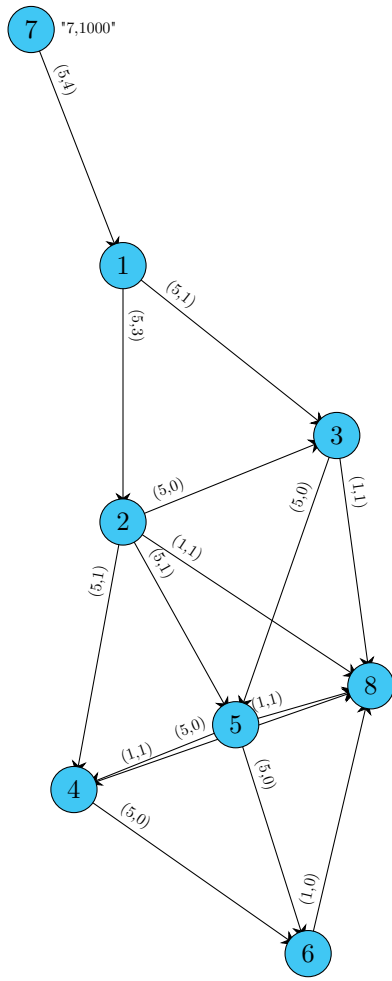


(b) Etichetto 8

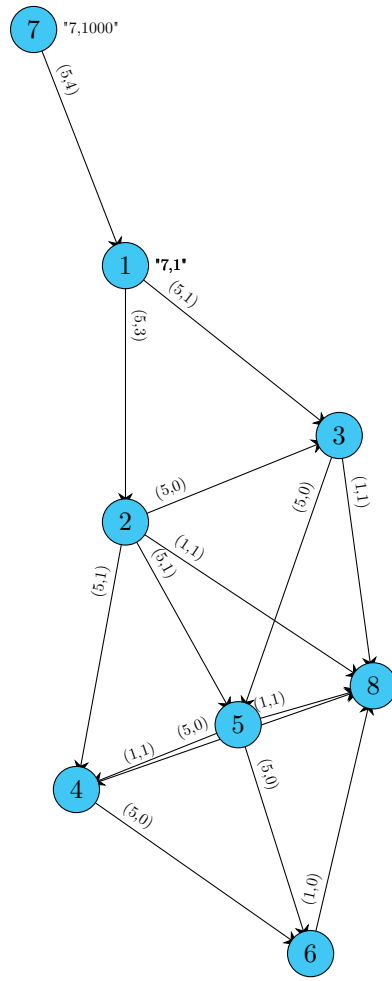


(a) Aumento il flusso di 1

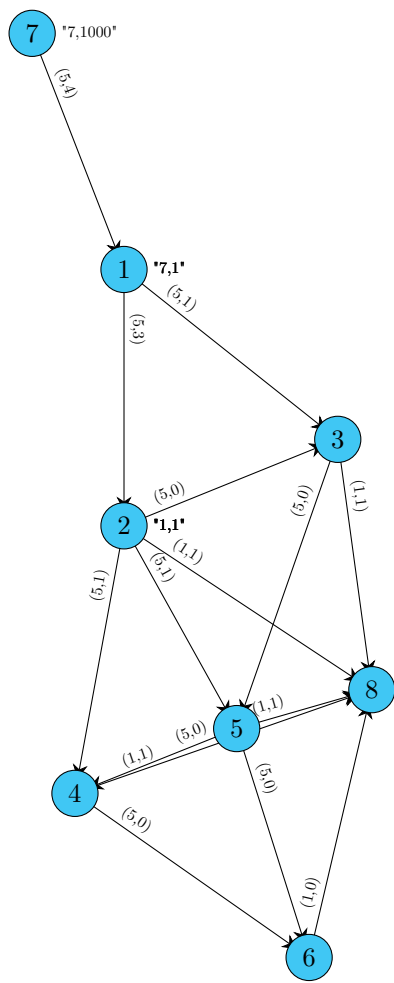
2.1.5 Iterazione 4



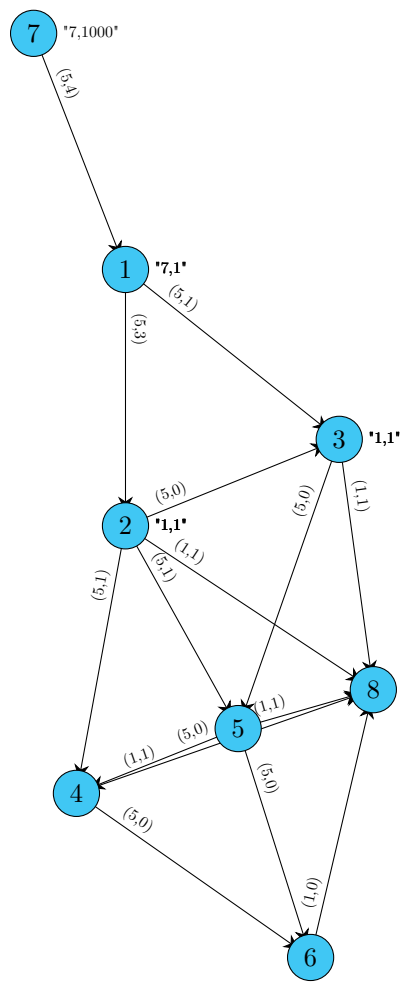
(a) Etichetto 7



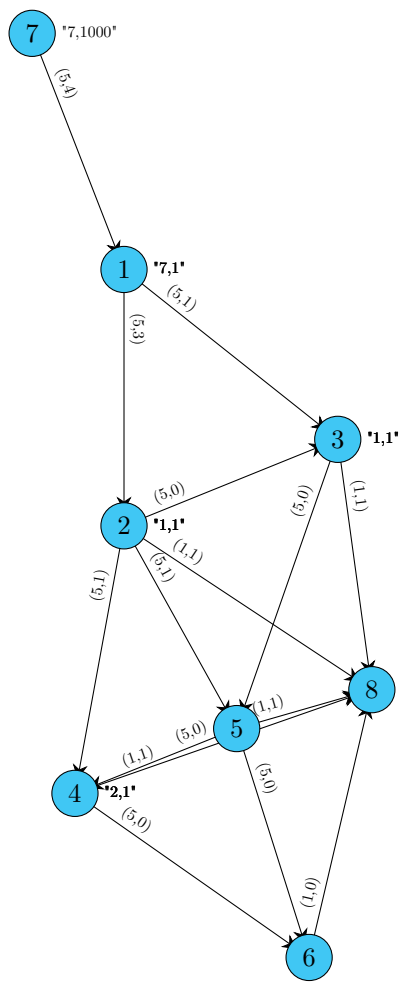
(b) Etichetto 1



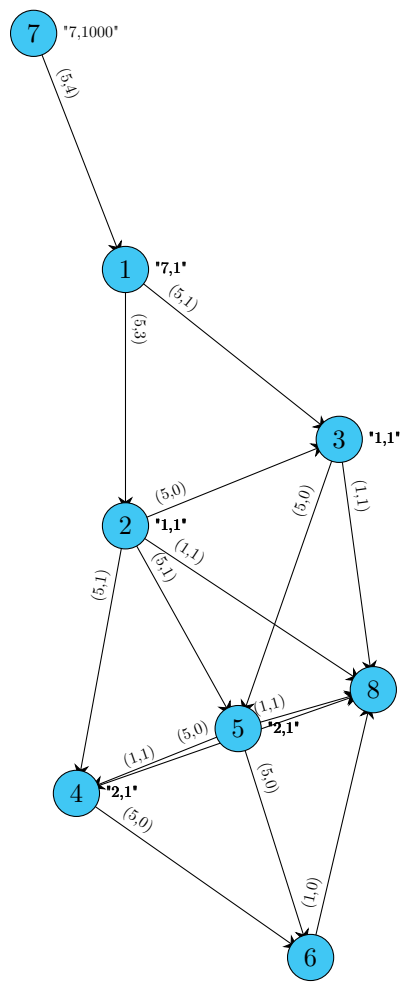
(a) Etichetto 2



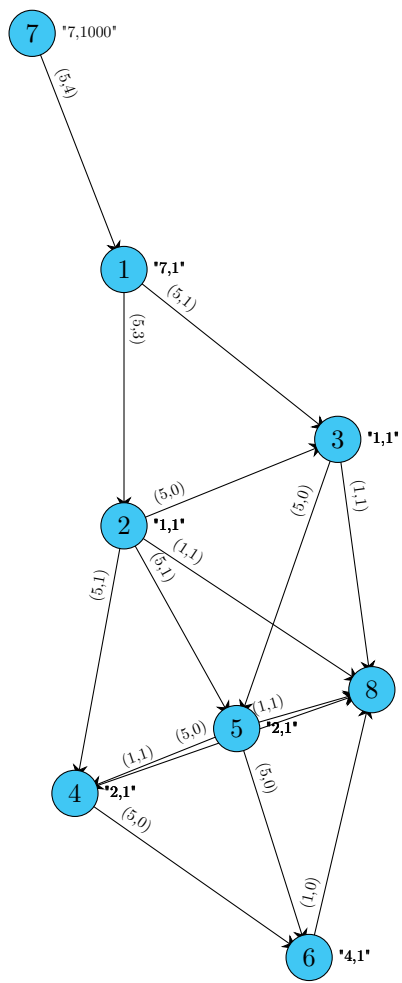
(b) Etichetto 3



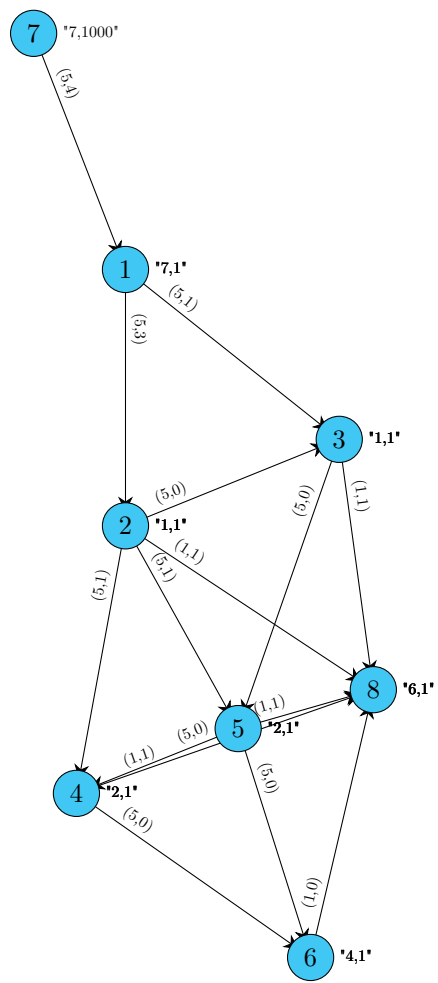
(a) Etichetto 4



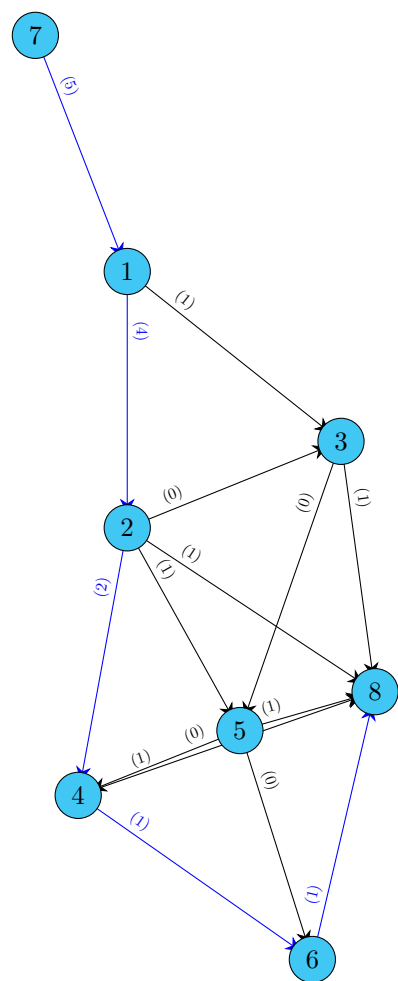
(b) Etichetto 5



(a) Etichetto 6



(b) Etichetto 8



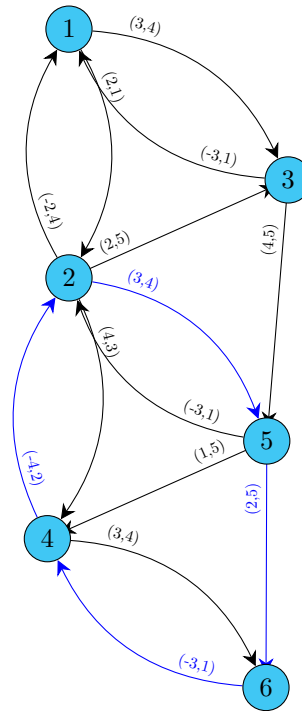
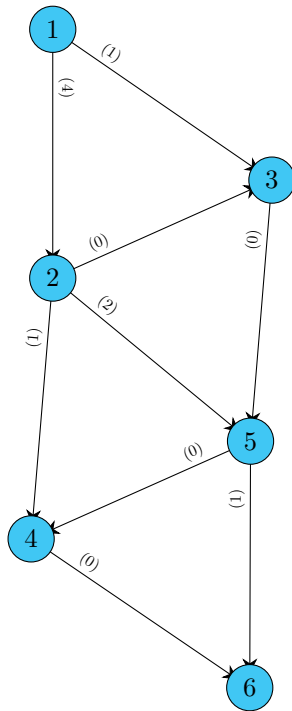
(a) Aumento il flusso di 1

2.1.6 Iterazione 5

2.2 Ricerca di cicli di costo negativo

Inizio la ricerca di cicli di costo negativo

2.2.1 Iterazione 0

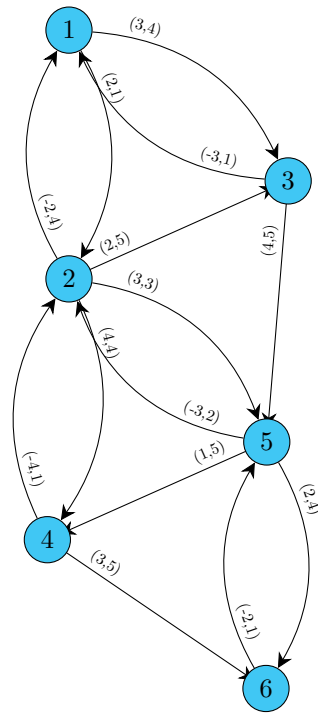
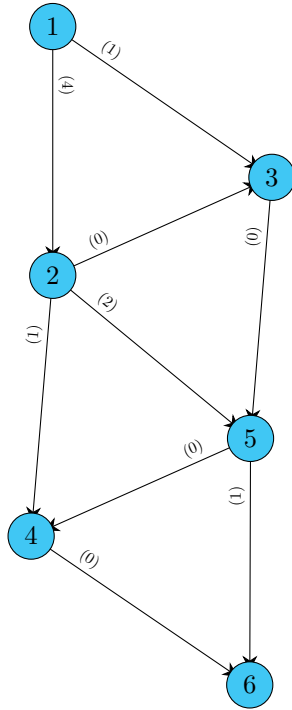


(a) Trovato ciclo di costo negativo

2.3 Ricerca di cicli di costo negativo

Inizio la ricerca di cicli di costo negativo

2.3.1 Iterazione 1



(a) Non ci sono più cicli di costo negativo, flusso minimo trovato!