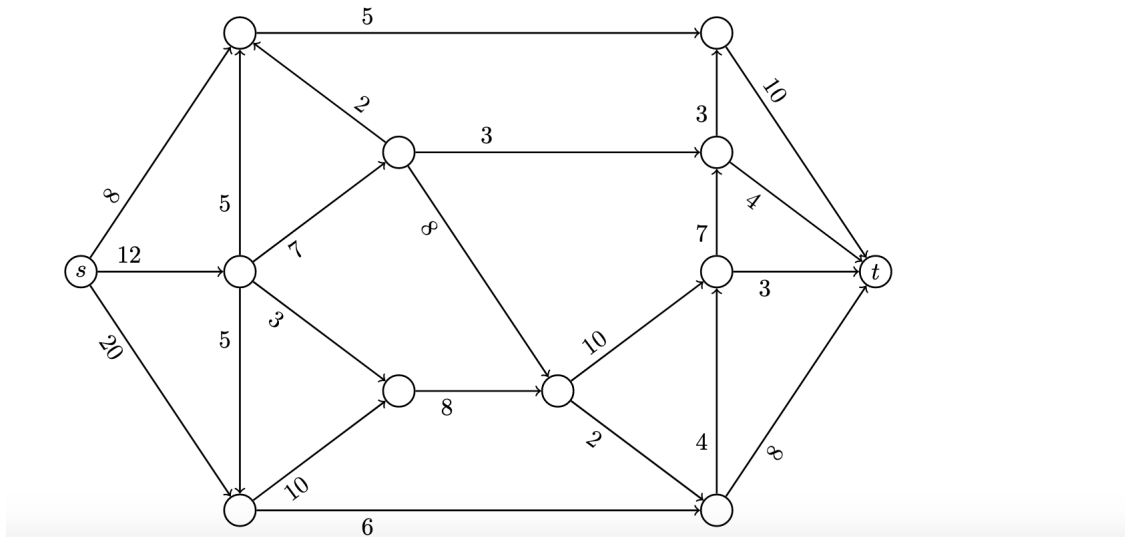


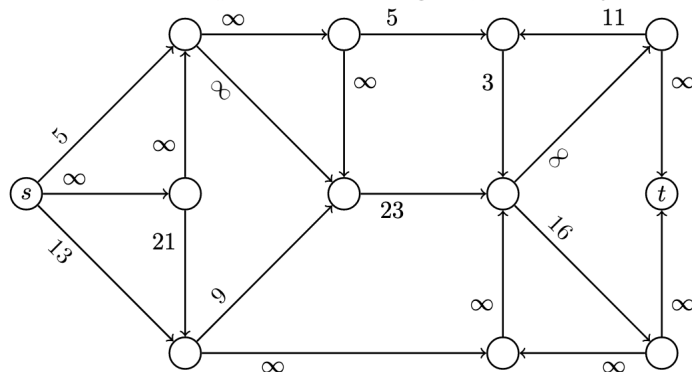
1. *Prjizjic*

4. V sledečem grafu lahko kapaciteto ene povezave povečamo za 1. Katera naj bo ta povezava, da bomo povečali maksimalni pretok?

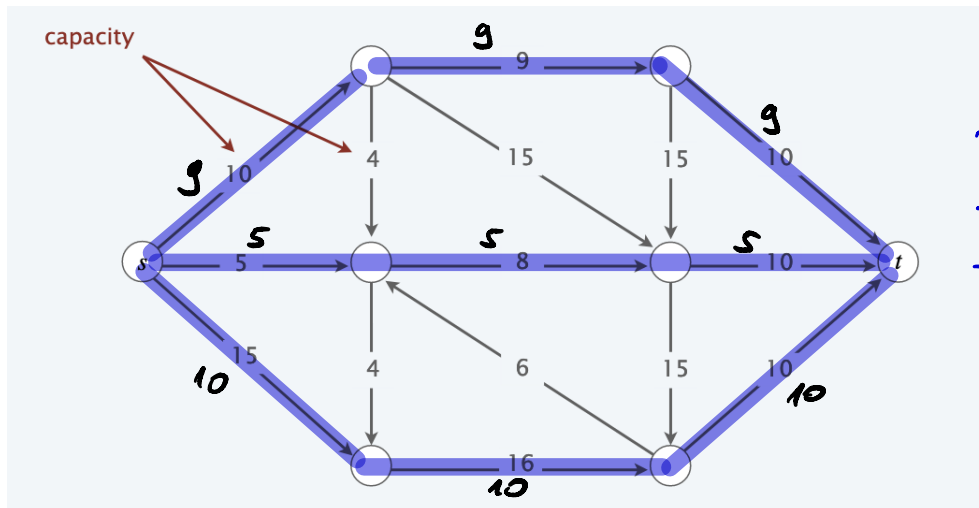


2. *Prjizjic*

5. Poišči maksimalen pretok v sledečem grafu, če ta obstaja!

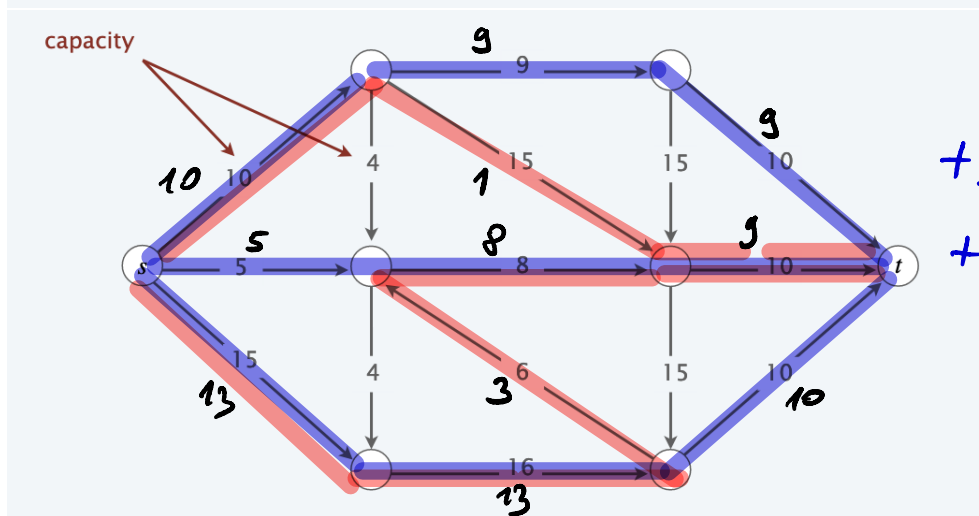


3. V naslednjem grafu poišči maksimalni pretok in minimalni prerez.



+9
+5
+10

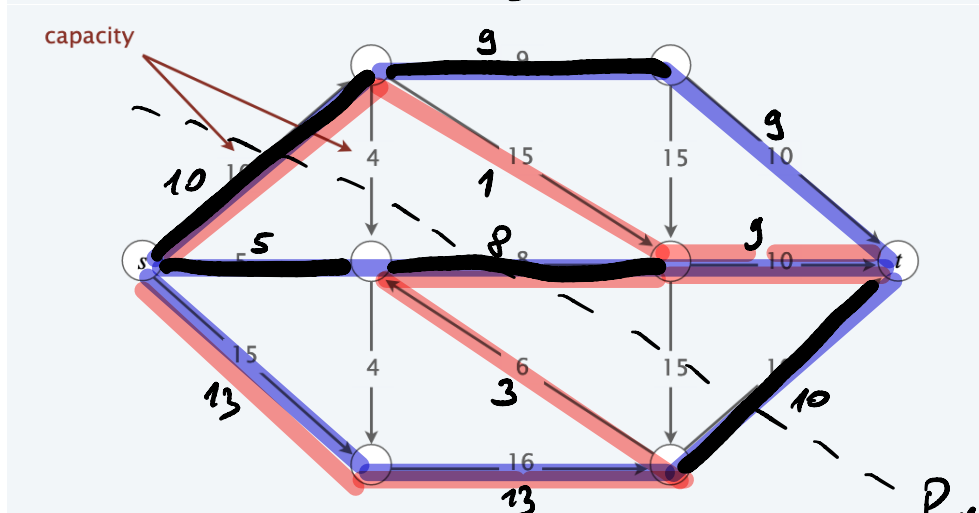
Skupaj = 24



+3

+1

Skupaj 28

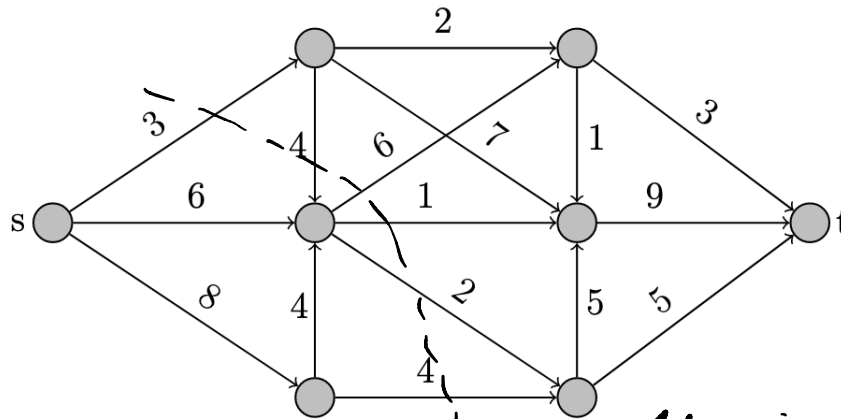


Prez:

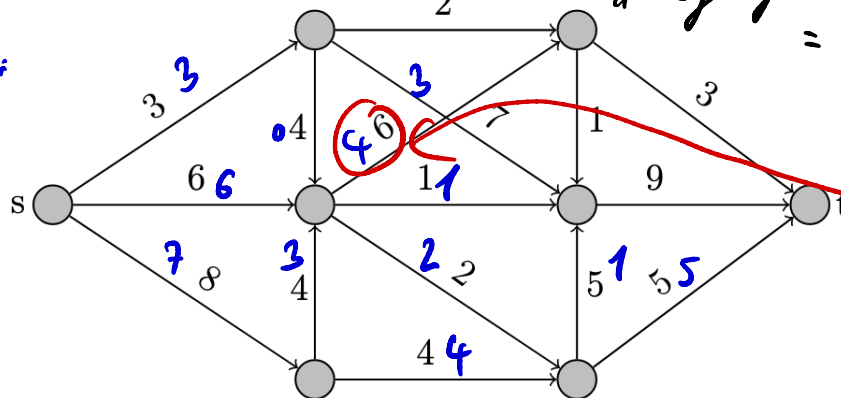
$10 + 0 + 8 + 0 + 10 = 28$

Opt. !!

4. V naslednjem grafu poišči maksimalni pretok in minimalni prerez.



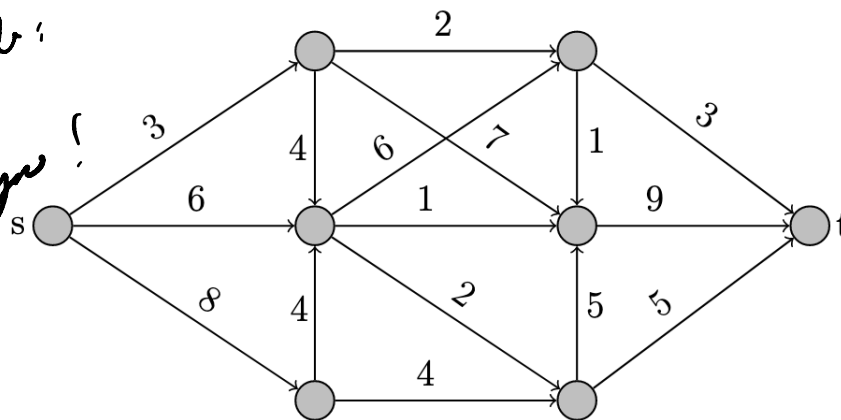
Pričetak:



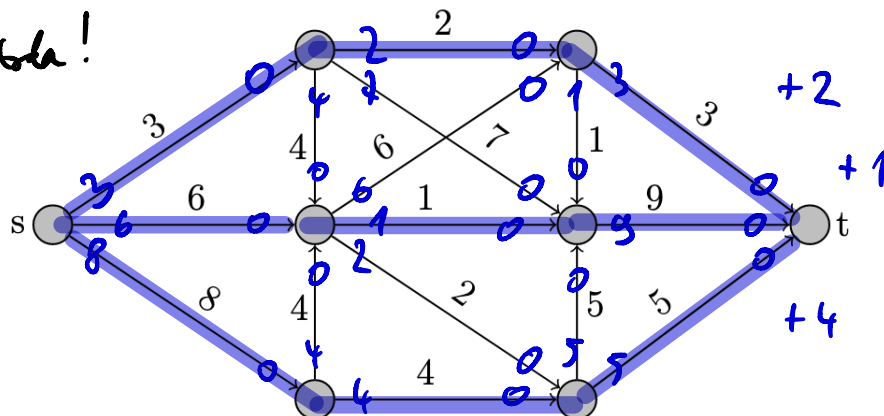
"Uganjan" min. presek
 $= 3 + 0 + 6 + 1 + 2 + 4 = 16$

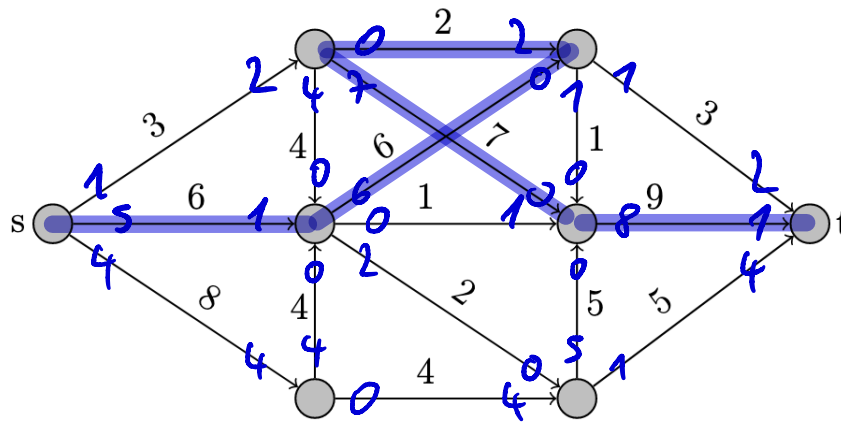
Napačen
 ugib!!

Boljši ugib!
 Preverite!
 Ne gre!

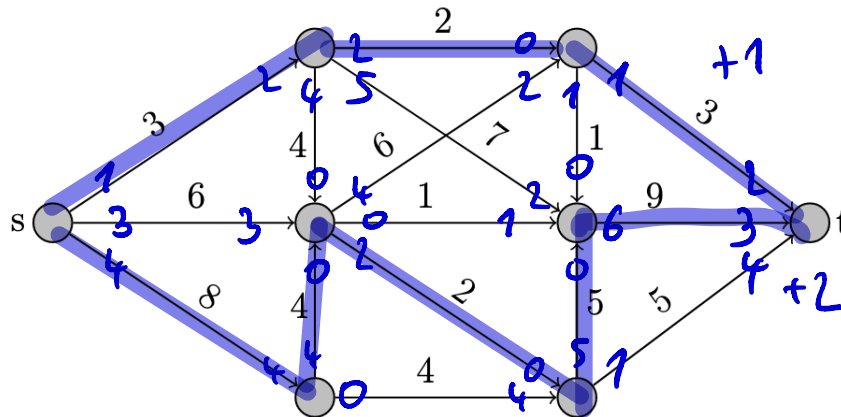


Klasična metoda!

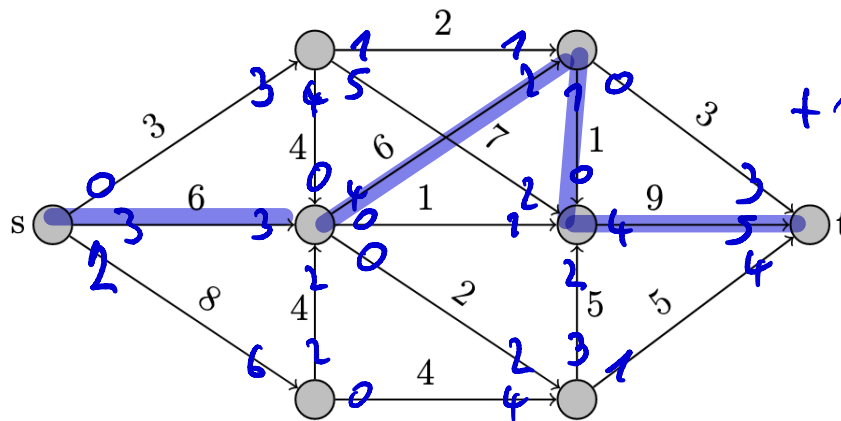




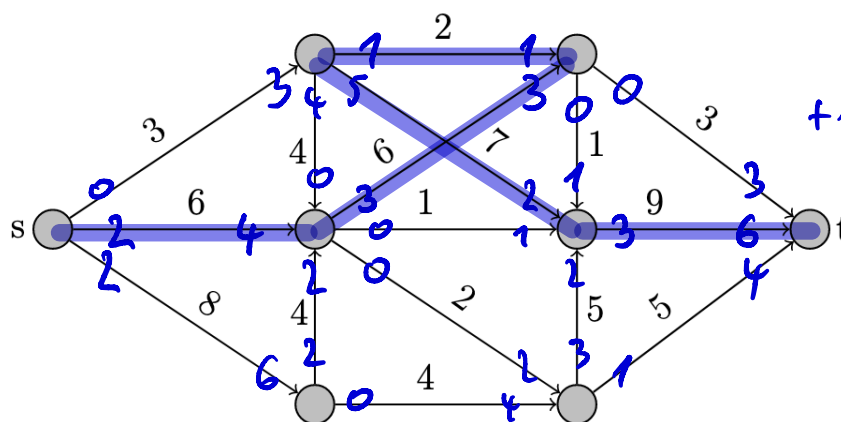
Path: $7+2=9$



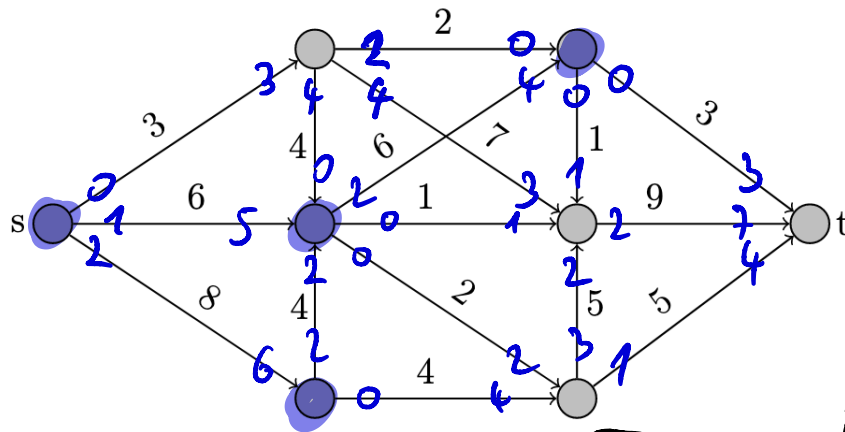
Path $9+1+2=12$



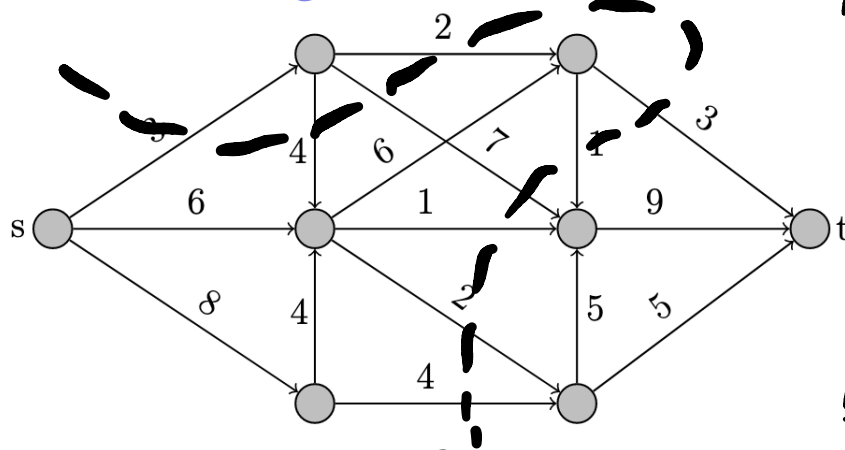
Path $12+1=13$



Path $13+1=14$



Path = 14

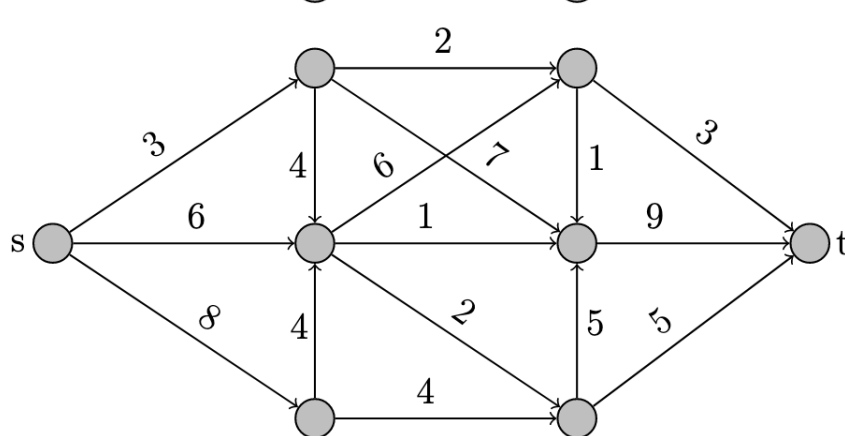
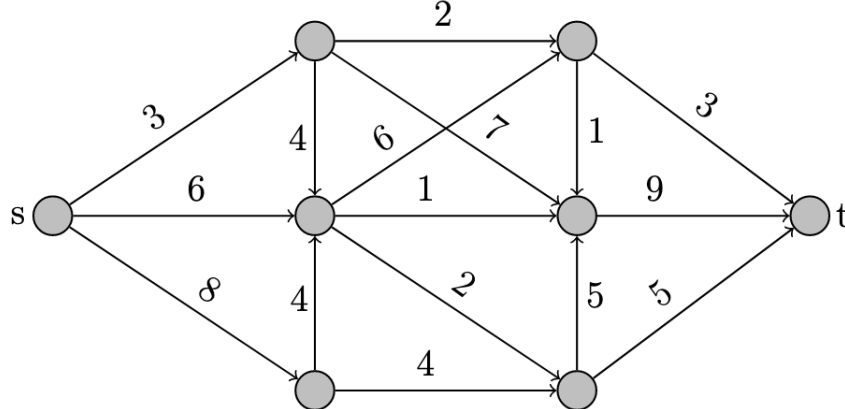


Proof:

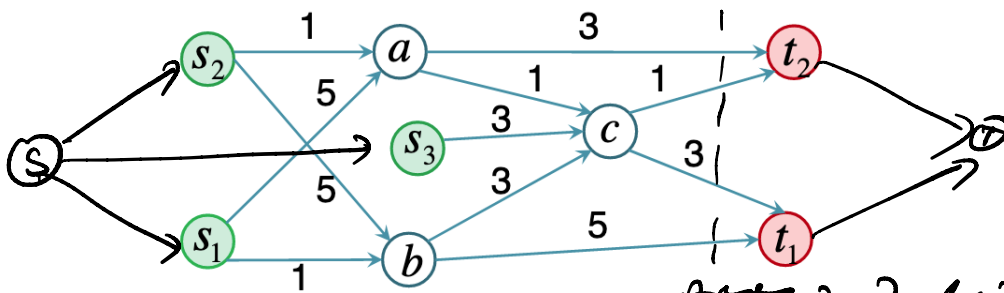
$$3 + 0 + 0 + 3 + 1 +$$

$$(0'') + 1 + 2 + 4 = 14$$

up
7 give it
B ~ B

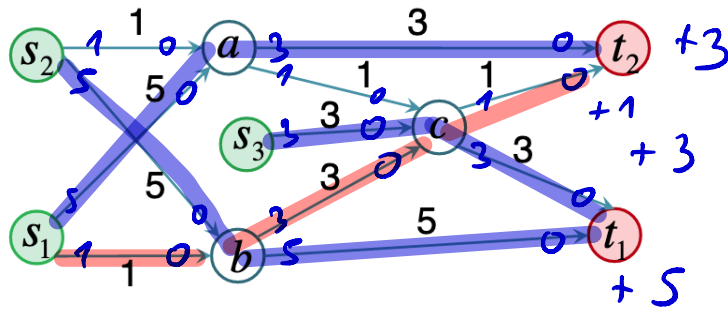


5. Dano je omrežje z več izvori in ponori. Poišči maksimalni pretok in minimalni prerez.

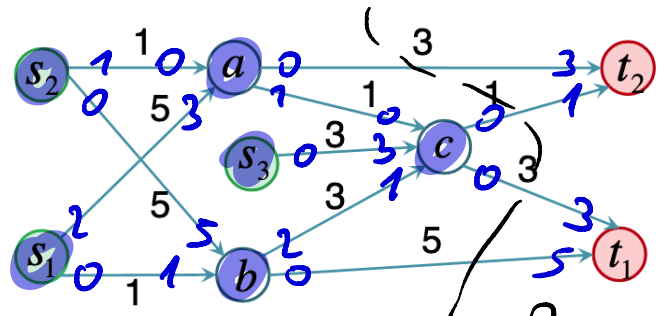


$\text{pretok} = 3 + 1 + 3 + 5 = \underline{\underline{12}}$

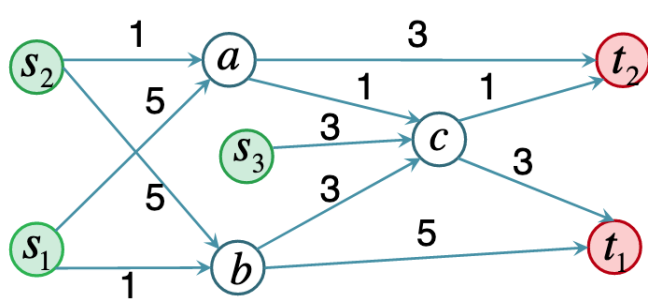
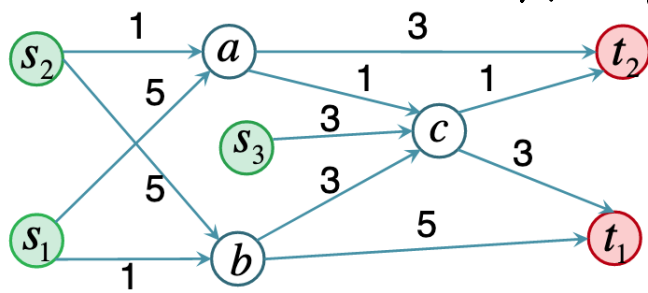
2. metoda,
nezajetne poti
od kateregakoli
do kateregakoli

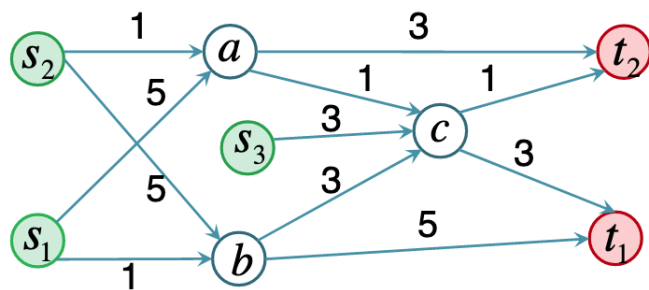
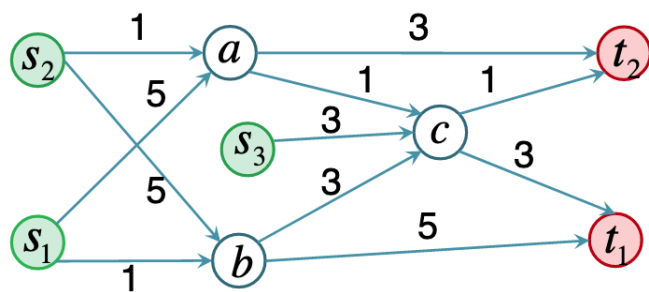
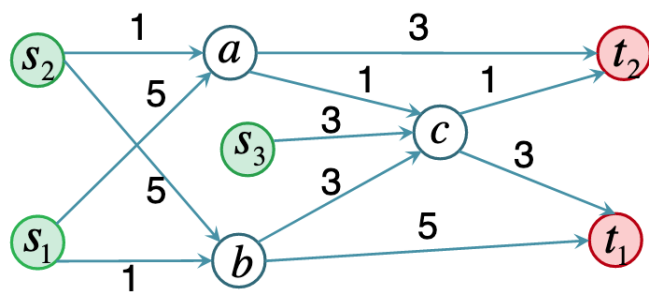
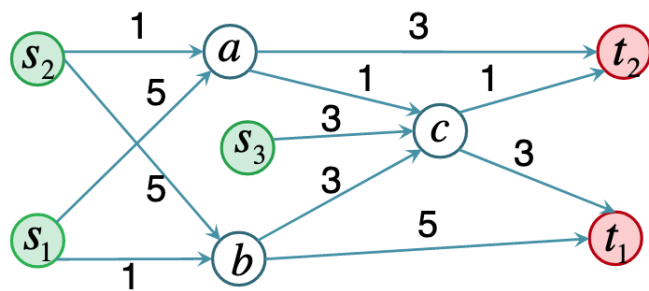
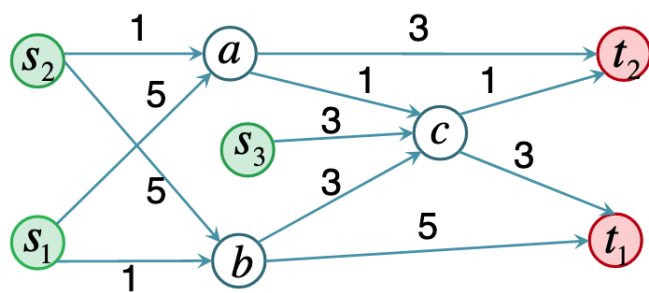


$\text{pretok} = \underline{\underline{12}}$



Pretok !! kot prvi,
uganjene !!



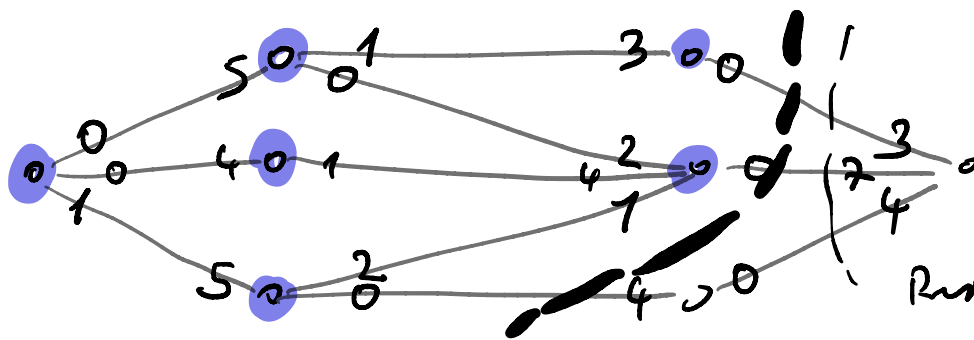
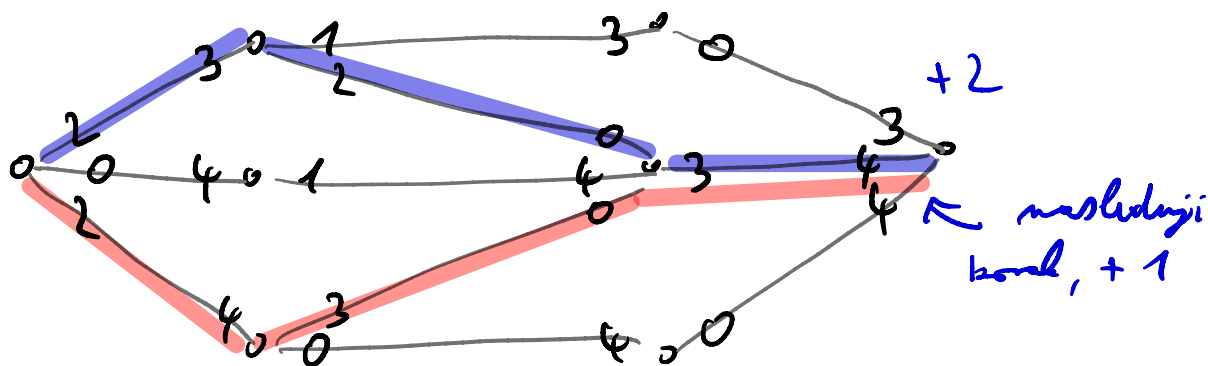
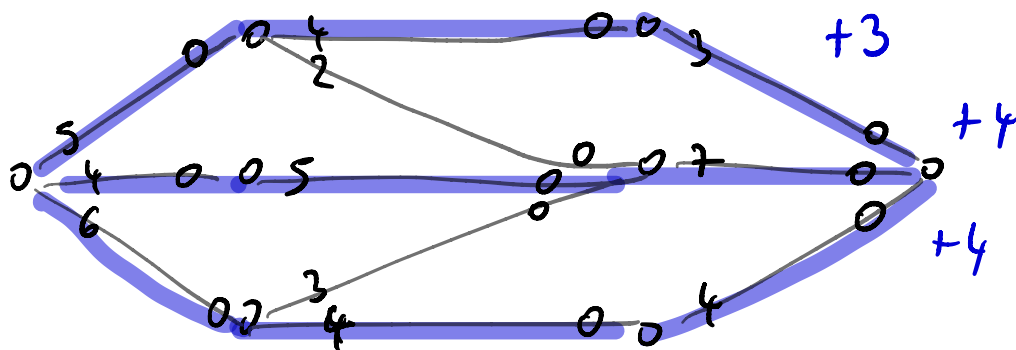
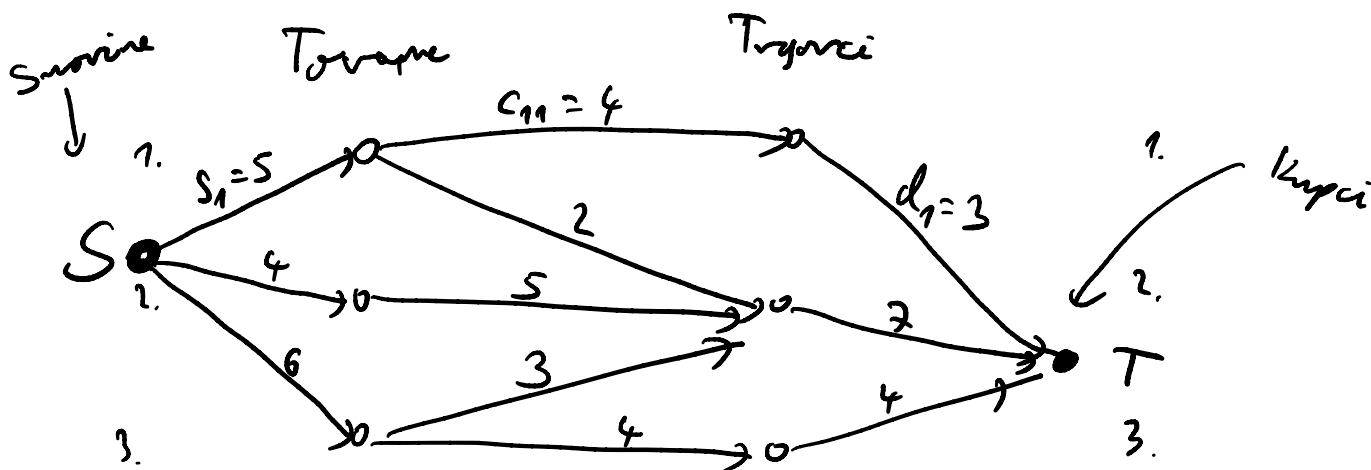


6. Proizvajalec in prodajalec avtomobilov ima m tovarn in n trgovin. Vsaka tovarna i proizvede s_i avtomobilov na mesec. Vsak trgovec j lahko proda d_j avtomobilov na mesec. Tovarna i lahko zalaga trgovino j s c_{ij} avtomobili na mesec. Formuliraj problem kot problem največjega pretoka in ga reši za podatke

$$s_1 = 5, s_2 = 4, s_3 = 6, d_1 = 3, d_2 = 7, d_3 = 4,$$

$$c_{11} = 4, c_{12} = 2, c_{13} = 0, c_{21} = 0, c_{22} = 5, c_{23} = 0, c_{31} = 0, c_{32} = 3, c_{33} = 4.$$

Koliko avtomobilov lahko največ prodamo na mesec?



Pretok: $3+4+4+1=14$

Pretok: $3+7+4=14$

Po algorithm: [↑] avg prog, ~~median~~ = $3 + 7 + 4 = \underline{\underline{14}}$