Københavns Universitet Introduktion til diskret matematik og algoritmer -Problem set 3

Victor Vangkilde Jørgensen - kft
410 kft410@alumni.ku.dk

 $March\ 15,\ 2025$

Contents

1	Que	Question 1															3													
	1.a																													3
	1.b		•								•		•								•									3
2	Que	Question 2															4													
	2.a																													4
	2.b																													4
	2.c																													4
	2.d		•						•		٠		٠					•		•	٠						•			4
3	Que	Question 3															4													
	3.a																•					•						•		4
	3.b																													4
	3.c																													4
	3.d																													4

1

1.a

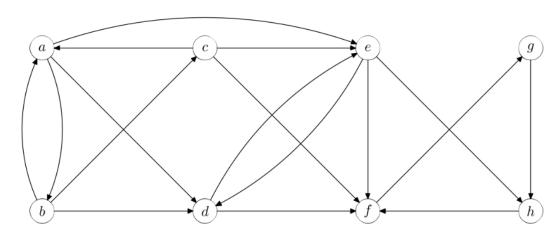


Figure 1: Directed graph G for which to compute strongly connected components in Problem 1a.

1.b

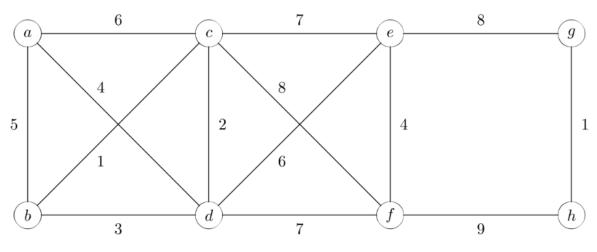


Figure 2

2

2.a

2.b

2.c

2.d

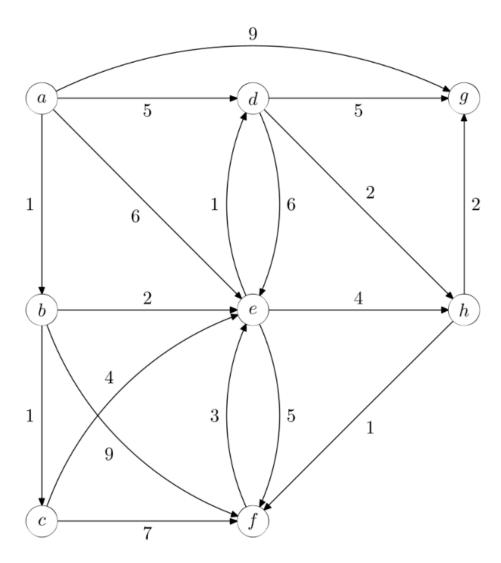


Figure 3: Directed graph Dijkstra's algorithm in Problem 3a.

3

3.a

3.b

3.c

3.d