# **Algorithms and Data Structures**

## Homework 11

### Dragi Kamov

### 21 May 2018

## Problem 1

7

-10

6

4

3

Before adding a constant to each weight, the shortest path would be A-B-C-D. If we add 10 to each edge weight we get:

0

17

16

13

14

And after this addition our Dijkstra’s algorithm will give us that the shortest path is directly from A-D.