



## **Exercise 2**

### **1, Complete the Basic “Assignment 1: ScroogeCoin” from the Book**

<https://bitcoinbook.cs.princeton.edu/> draft here

[https://www.lopp.net/pdf/princeton\\_bitcoin\\_book.pdf](https://www.lopp.net/pdf/princeton_bitcoin_book.pdf)

This exercise is also available from the Coursera course

(<https://www.coursera.org/learn/cryptocurrency> where you can upload your solution and test it.

I have also included some test file in a separate folder that you use to test your solution plus a starter main file.

2. Complete the second part of the “assignment” which calculates the set of transactions that maximizes total transaction fees.

Approaches: see class powerpoint slides

Using 1) A Greedy Approach

Using 2) Brute Force Search (for small sized Tx sets – e.g. Maximum 10)

Using 3) Topological Sort

You should definitely implement approaches 1 and 2.

You will need to construct test sets (of Tx's) in order to test your program

## **Instruções**

- Este Exercício é “Grupo (3)”.
- Prazo para Entregar no Moodle : Dia 19 de Novembro de 2029
- Entregar : A sua implementação (código num ficheiro zip) e Relatório
- Avaliação – Discussão com Grupo.