## Problem ID: 3

## Problem Name: 3D Printer Dilemma

## Description: A new 3D printer has been delivered to the Department of Mickey Mouse Studies. Students and staff are submitting requests to have their favourite cartoon characters printed in various colours and sizes. Each character to be printed requires a specific amount of plastic in one or more colours. The owner of the printer must prioritise the jobs to ensure that the maximum number of people get their characters made. Given a set of requests that are characterised by a list of the amount of plastic in various colours needed to make a model, and a fixed amount of plastic that is available in each colour, propose a method for returning a list of people whose jobs can be completed such that the list contains as many people as possible given the limited supplies available.

## UB Number:

## Name:

<ADD YOUR **ONE PAGE** ANALYSIS AND PROPOSED SOLUTION HERE AND REMOVE THIS TEXT.>

<ADD YOUR FLOW CHART OR PSEUDOCODE HERE AND REMOVE THIS TEXT. NO ADDITIONAL TEXT SHOULD BE ON THIS PAGE EXCEPT FOR TEXT IN A FLOWCHART OR PSEUDOCODE ALGORITHM>