## STOR-609 Assessment 1 - Marks and Feedback

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## 1 Quality of Source Code

- Your code is of good quality
- You have provided some useful in code comments

Mark (out of 5): 5

#### 2 Solution

- You have provided a working solution for generating integer partitions using a generic backtracking algorithm
- You have attempted a solution for generating gray codes using a generic backtracking algorithm
- Your gray code solution has a few issues, but you have provided some notes discussing the issues you encountered and proposed possible solutions for future investigation

Mark (out of 5): 3

## 3 Understanding Design Principles

• You have provided an implementation for a generic backtracking algorithm which is similar to that described in this pseudo code provided.

#### Suggestions

• It would be useful for you to consider the computational complexity of your methods in more detail (i.e. how much extra "computation" is required as your problem size increases).

Mark (out of 5): 4.5

# 4 Quality of Written Communication

• You have provided some detailed and high quality descriptions of how your problem specific procedures work.

#### Suggestions

• It would be really good if you also provided pseudo code for each of your **accept**, **reject**, **first**, and **next** methods.

Mark (out of 5): 4.5

### 5 Overall Comments and Marks

- Overall this is a good piece of work. You found the second problem a little challenging, but you have provided supporting material indicating how you approached this problem and provided notes regarding possible solutions.
- Did you find any issues when using your code for solving problems for larger values of N?
- Do you remember looking at bitwise operations in the **Introductory Python Course**? How might they be useful in the context of this assignment?

Overall Mark (out of 20): 17