

STOR-609 Assessment 1 - Marks and Feedback

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1 Quality of Source Code

- You have provided some very high quality python code.
- Code documentation is of a high standard

Mark (out of 5) : 5

2 Solution

- For both problems you have provided example code that produces a correct solution.
- Your code is designed so that it was easy for me to change the problem and produce further correct solutions (i.e. your code is both **re-usable** and **re-runnable**)

Mark (out of 5) : 5

3 Understanding Design Principles

- You have considered carefully the trade off between different types of representation (data structures).
- You have used Object Orientation as an underlying design approach and leveraged this to provide a **re-usable** and extensible design.

Notes

- It would be good if you made a clear case for using a python class for representing the backtracking algorithm. What aspects of Object Orientation did you employ that were useful in this case ? Why are they better than the alternatives ? What might the alternatives be ?
- 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

4 Quality of Written Communication

- You have provided very extensive and clear descriptions of your methods, design, and solutions to each of the problems.

- You have provided pseudo code to explain how each component of your solutions to the problems functions. This is very valuable in terms of re-usability

Mark (out of 5) : 5

5 Overall Comments and Marks

- Very strong knowledge of python and use of Object Orientation.

Notes

- What issues, if any, did you have when looking at larger problems e.g. for $n > 20$ in the Gray code problem ?
- 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) : 19