# Further Computer Programming

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#### 1 Introduction

# 2 Assumptions

- We are assuming that the population remains constant, so no increase or deaths (due to the young demographic, death rates are negligible). This population in Bristol will however change during reading week where there is a movement of students though they are still accounted for.
- We are assuming an infection time of 14 days, and an immunity period of 30 days, before a recovered individual becomes susceptible again.
- We have assumed that there are no government guidelines in place, i.e. lockdowns, vaccines etc.

#### 3 Simulation

### 4 Mathematical Reasoning