Question 4 was built and run in IntelliJ terminal and I have removed all the build files (iml, etc) and just left the java files. Input can be given by adding 4 numbers for face 1, pressing return, add 4 numbers for face 2, and so on.

If Running on terminal (windows)
>>javac Solver.java
>>java Solver
>> input 4 integers
>> input 4 integers
>> input 4 integers
>> input 4 integers
>> input 4 integers
>> input 4 integers

Note: Q4 part b is located in the pdf file of the theory questions.

Note: The output is showing a much larger amount of nodes produced and expanded compared to the example shown in the A1 description. This could be because of the value of path cost that I have chosen or inefficiency of some sort in the algorithm.