PHYS379
Theory Group Project
Contributions to the Group

Physics | Lancaster University

Each student within your group should complete one of these forms.
Group Name: Group 3 (Quantum Computing B)
Student Name: Willow Sparks

Each student must allocate every other student a mark between -6 and 6.
One mark corresponds to one sub-letter grade.
You will not assign yourself a grade.

Student Names in your Group	Score (between -6 and +6)
Ana Villarrubia Palacin	5
Sam Wade	3
Sid Richards	-2

Please write a few sentences justifying your marks.

- Ana: Was incredibly helpful and hardworking throughout the project. Always kept in clear communication with the group, took a lot of initiative on the report, found useful resources such as qiskit, implemented Grover search in qiskit which could then run on a real quantum computer (although due to difficulties with the IBM quantum experience service this had to be dropped), generally helped maintain project organisation and overall contributed massively.

- Sam: Was generally quite organised and initially took on a lot of work for the Shor's project, as well as doing a lot of work for our initial presentation and project proposal. However, it turned out his implementation of Shor's algorithm was incorrect due to misconceptions and we were unaware of this for a long time due to a lack of communication on that area of the project. This nearly set us back massively. However, despite making some mistakes he still contributed a large amount to the project and was much better at communicating after his mistake.

- Sid: Implemented a small scale version of RSA & the classical factorisation algorithm and did a lot of research into the implications of quantum computing on the security of different cryptosystems. This was useful but it didn't really need to take 3-4 weeks to implement, so I'm not sure what he was doing. The few references he provided for the report were consistently low quality and had to be discarded. Didn't get particularly involved in the implementation of simulating the quantum subroutine in Shor's algorithm as required and also didn't say much in meetings or on teams.

Signature: ……WSparks………………………………….   Date: 17/03/2023
Please submit on Moodle by Friday 24 March 2023 @ 3pm.