

Quantum Computing for Computer Scientists Hints + Solution

This puzzle looks like standard logic puzzle, but some of the genders are ambiguous, so let's start by resolving those.

Female: Avery, Chris, Helen

Male: Bartholomew, Devon, Eric, Finley, and Gordon

Once we know the genders, we can work through the rest of the logic and figure out who is scheduled for which sessions. Abbreviating each person by their first initial, the unique solution is:

	A	B	C	D
1		Monday	Tuesday	Wednesday
2	Morning	ABCDEFGH	ADEFG	CDFGH
3	Early Afternoon	ABCDEFGH	H	ACEFG
4	Late Afternoon	ABCDEFGH	ADE	CDFG
5	Evening	ABCDEFGH	H	ACEFG
6	Late Night	ABCDEFGH	ABCDEF	BCDFGH

Next, we disentangle each TA's schedule, highlighting the sessions they participate in. For example, for Avery and Bartholomew, we get:

Avery

	A	B	C	D
1		Monday	Tuesday	Wednesday
2	Morning	ABCDEFGH	ADEFG	CDFGH
3	Early Afternoon	ABCDEFGH	H	ACEFG
4	Late Afternoon	ABCDEFGH	ADE	CDFG
5	Evening	ABCDEFGH	H	ACEFG
6	Late Night	ABCDEFGH	ABCDEF	BCDFGH

Bartholomew

	A	B	C	D
1		Monday	Tuesday	Wednesday
2	Morning	ABCDEFGH	ADEFG	CDFGH
3	Early Afternoon	ABCDEFGH	H	ACEFG
4	Late Afternoon	ABCDEFGH	ADE	CDFG
5	Evening	ABCDEFGH	H	ACEFG
6	Late Night	ABCDEFGH	ABCDEF	BCDFGH

Note that the first forms the shape of a B, and the second and L.

Repeating the process for all the TAs (while preserving alphabetical order), we get the final answer: **BLUEBOOK**. Perhaps unhelpfully, this solution is alluded to by the title (literally the title of a blue book) and the references to *rootkit* and Blockade, a precursor of the class game *Snake*, both terms related to finals week at Caltech, during which blue books are commonly used.

Hints:

- 1) Eric is not dating Chris.
- 2) The computer's output table is presented in a surprisingly useful format.
- 3) Take a look at your finished tables again. Perhaps you'll get an inkling about what to do with the cels.