1. You should rename the weight column to atomic\_mass **XXX**
2. You should rename the melting\_point column to melting\_point\_celsius and the boiling\_point column to boiling\_point\_celsius **XXX**
3. Your melting\_point\_celsius and boiling\_point\_celsius columns should not accept null values **XXX**
4. You should add the UNIQUE constraint to the symbol and name columns from the elements table **XXX**
5. Your symbol and name columns should have the NOT NULL constraint **XXX**
6. You should set the atomic\_number column from the properties table as a foreign key that references the column of the same name in the elements table **XXX**
7. You should create a types table that will store the three types of elements **XXX**
8. Your types table should have a type\_id column that is an integer and the primary key **XXX**
9. Your types table should have a type column that's a VARCHAR and cannot be null. It will store the different types from the type column in the properties table **XXX**
10. You should add three rows to your types table whose values are the three different types from the properties table **XXX**
11. Your properties table should have a type\_id foreign key column that references the type\_id column from the types table. It should be an INT with the NOT NULL constraint **XXX**
12. Each row in your properties table should have a type\_id value that links to the correct type from the types table **XXX**
13. You should capitalize the first letter of all the symbol values in the elements table. Be careful to only capitalize the letter and not change any others **XXX**
14. You should remove all the trailing zeros after the decimals from each row of the atomic\_mass column. You may need to adjust a data type to DECIMAL for this. The final values they should be are in the atomic\_mass.txt file **XXX**
15. You should add the element with atomic number 9 to your database. Its name is Fluorine, symbol is F, mass is 18.998, melting point is -220, boiling point is -188.1, and it's a nonmetal **XXX**
16. You should add the element with atomic number 10 to your database. Its name is Neon, symbol is Ne, mass is 20.18, melting point is -248.6, boiling point is -246.1, and it's a nonmetal **XXX**
17. You should create a periodic\_table folder in the project folder and turn it into a git repository with git init **XXX**
18. Your repository should have a main branch with all your commits **XXX**
19. Your periodic\_table repo should have at least five commits **XXX**
20. You should create an element.sh file in your repo folder for the program I want you to make **XXX**
21. Your script (.sh) file should have executable permissions **XXX**
22. If you run ./element.sh, it should output only Please provide an element as an argument. and finish running. **XXX**
23. If you run ./element.sh 1, ./element.sh H, or ./element.sh Hydrogen, it should output only The element with atomic number 1 is Hydrogen (H). It's a nonmetal, with a mass of 1.008 amu. Hydrogen has a melting point of -259.1 celsius and a boiling point of -252.9 celsius. **XXX**
24. If you run ./element.sh script with another element as input, you should get the same output but with information associated with the given element. **XXX**
25. If the argument input to your element.sh script doesn't exist as an atomic\_number, symbol, or name in the database, the only output should be I could not find that element in the database. **XXX**
26. The message for the first commit in your repo should be Initial commit **XXX**
27. The rest of the commit messages should start with fix:, feat:, refactor:, chore:, or test: **XXX**
28. You should delete the non existent element, whose atomic\_number is 1000, from the two tables **XXX**
29. Your properties table should not have a type column **XXX**
30. You should finish your project while on the main branch. Your working tree should be clean and you should not have any uncommitted changes **XXX**