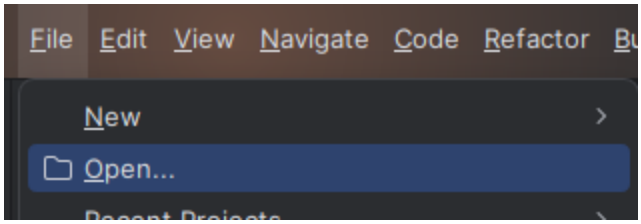
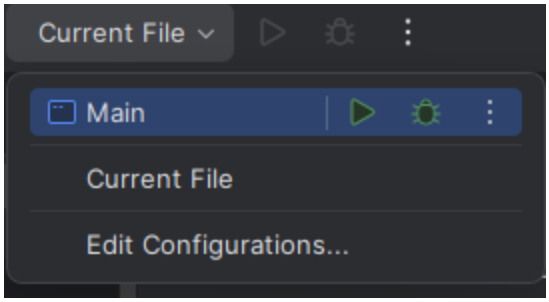
Rodriguez | Tan QMC Simulator User Manual

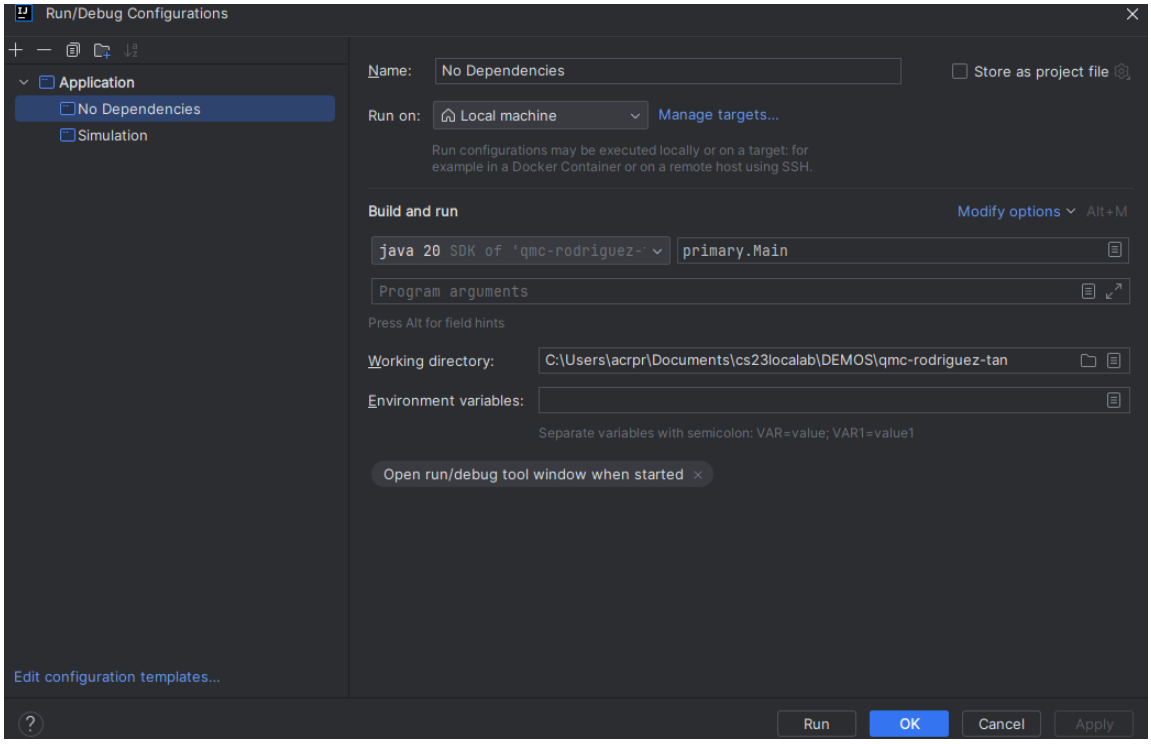
1. To open the project in IntelliJ simply open the app and when prompted, open an existing project and locate where you downloaded the project.



2. After getting the project open in IntelliJ, edit the configuration by clicking the edit button in this menu

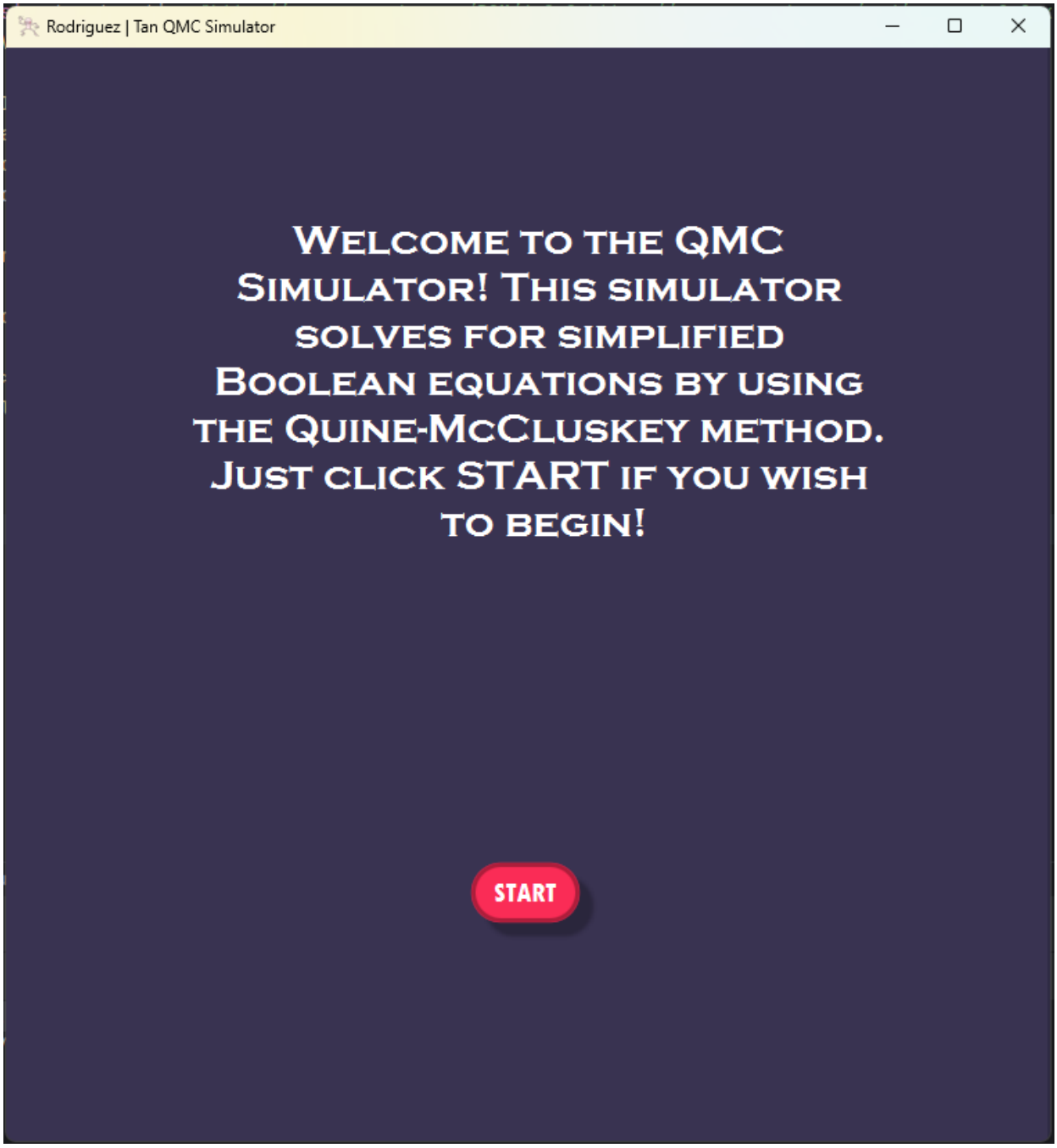


After doing so, click the + icon and add a new application configuration and follow this pattern (Note: clicking the page icon on the rightmost of the class field will direct you to the class needed to run the application)

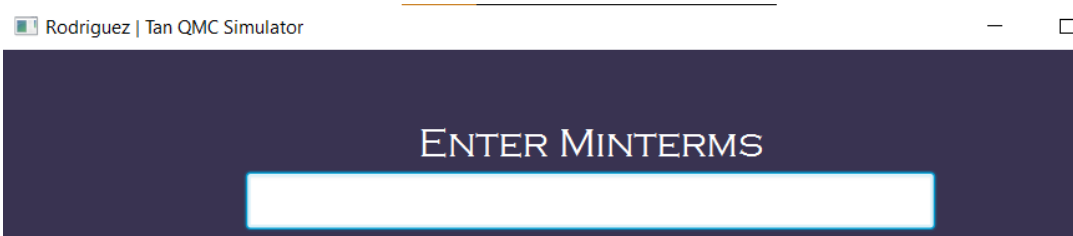


Click apply and then run and proceed with the program.

3. Upon running the program, a UI will open and show a welcome message. Users can click on the ‘START’ button if they want to begin.

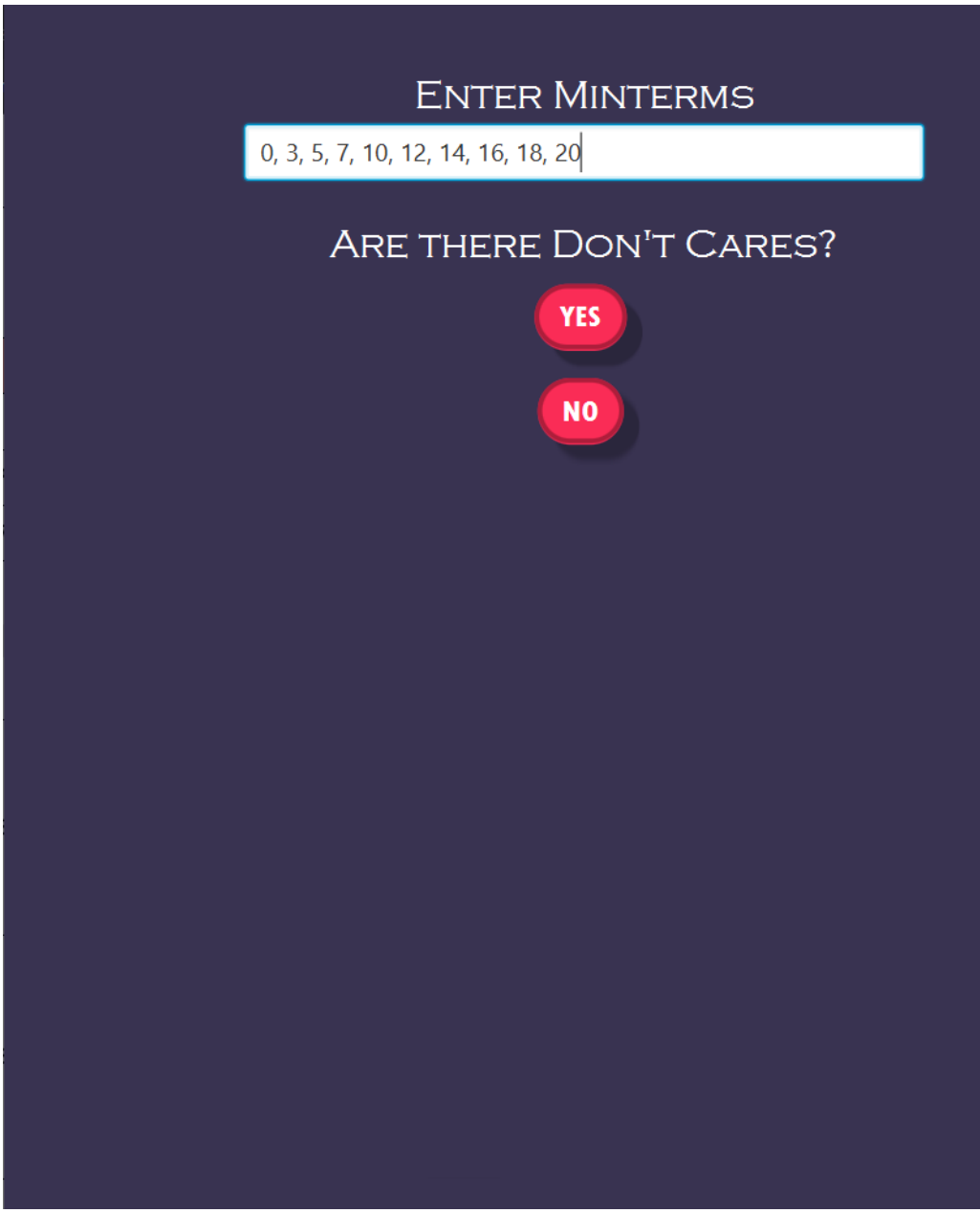


4. Upon clicking on the START button, the program will ask the user to enter the minterms to be used and a text input box will appear. The user may input the at least one or more minterms, separating them by using



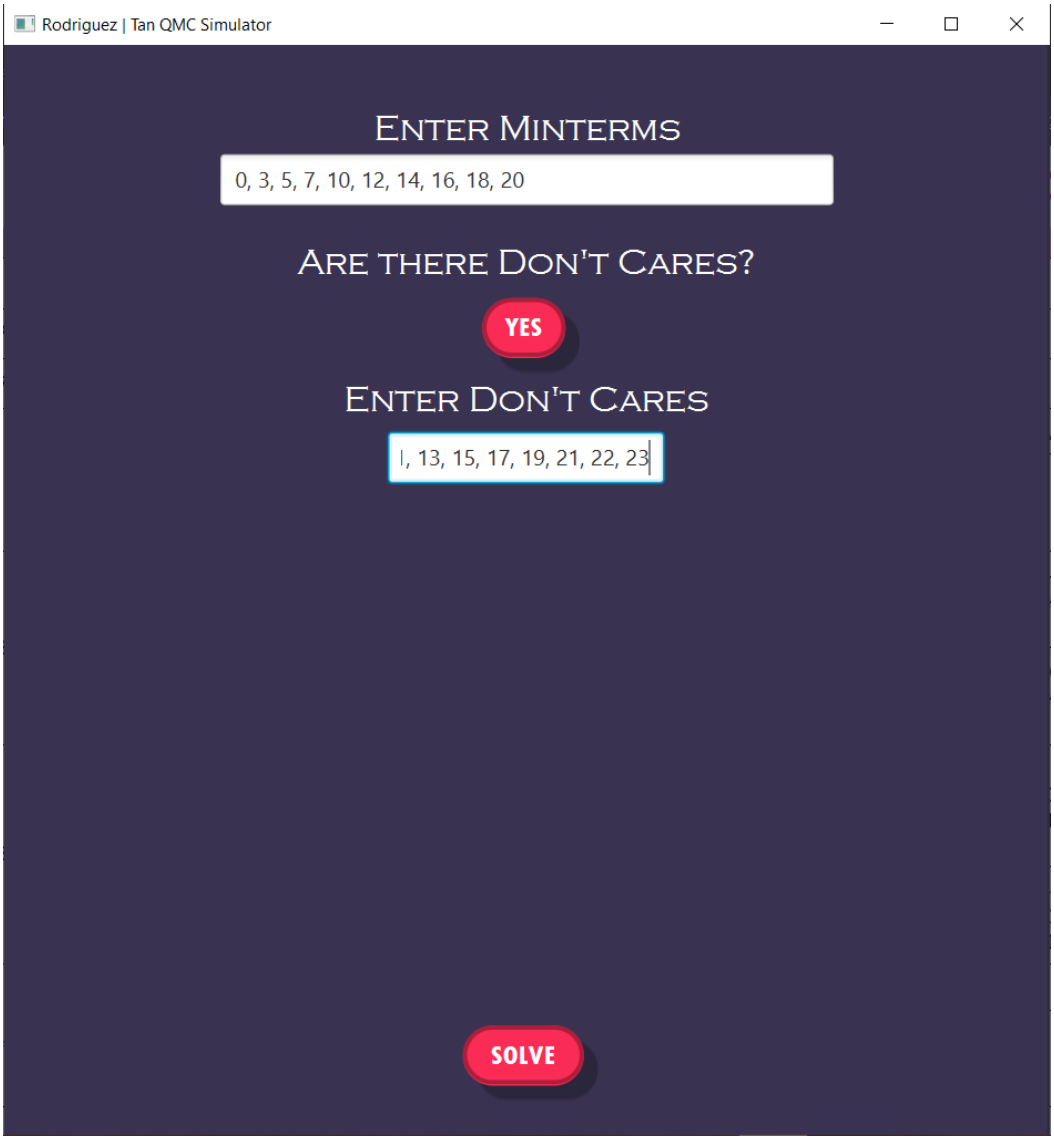
commas (,) and press ‘Enter’.

5. Upon entering the minterms in the text input box, the program will ask the user if there are any Don’t Care conditions and will display a ‘YES’ and ‘NO’ button. Users can click on the button that corresponds to their choice.



6. Step 4
    a. Upon clicking ‘YES’, the program will prompt the user to give the Don’t Care conditions by typing it in the new text input box and pressing ‘Enter’. After that, the ‘SOLVE’ button will appear at

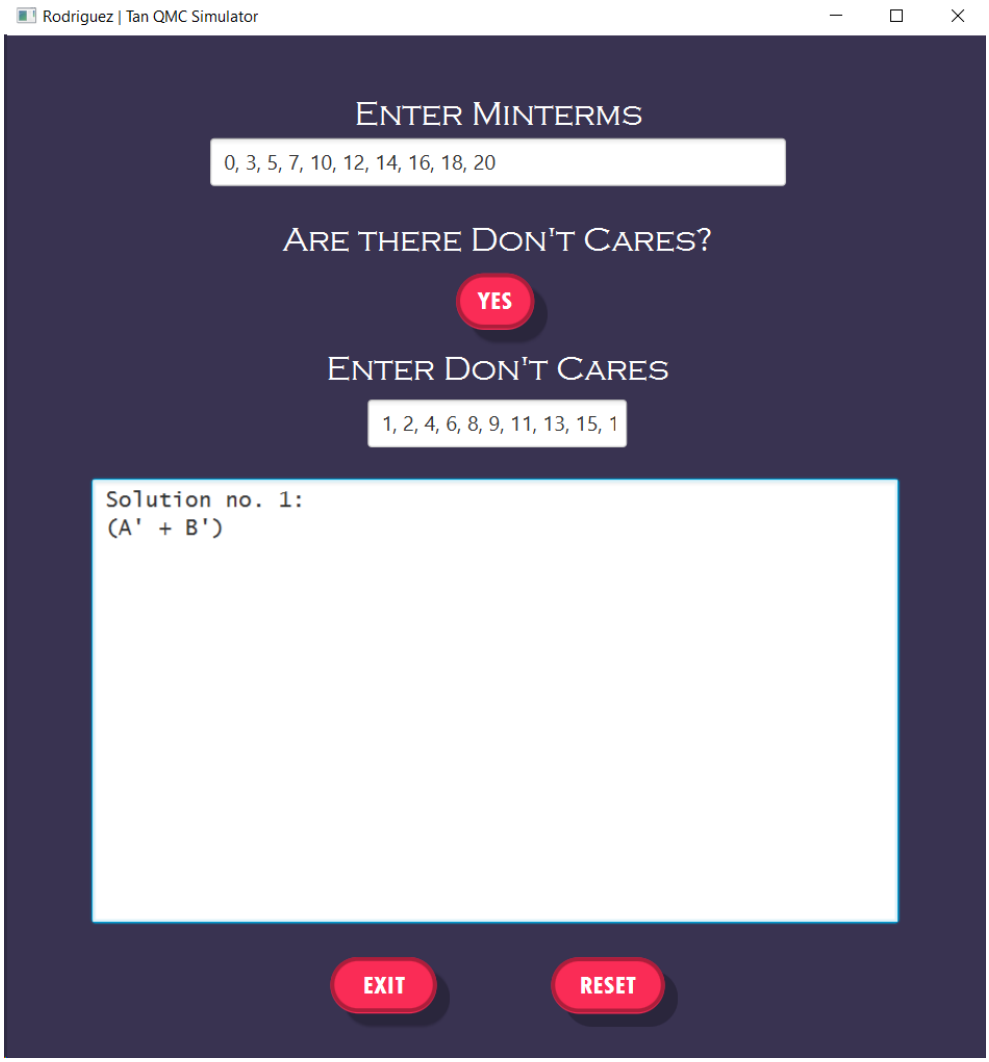
the bottom. By clicking on the ‘SOLVE’ button, the program will start to solve for the simplified Boolean expression.



b. Upon clicking ‘NO’, the ‘SOLVE’ button will appear at the bottom. By clicking on the ‘SOLVE’ button, the program will start to solve for

the simplified Boolean expression.

7. After clicking on the ‘SOLVE’ button, the answers will be displayed. The ‘EXIT’ and ‘RESET’ buttons will also be displayed. By clicking on the ‘EXIT’ button, the user will be ending the program. On the other hand, by clicking on ‘RESET’, the program will go back to asking for minterms from the user.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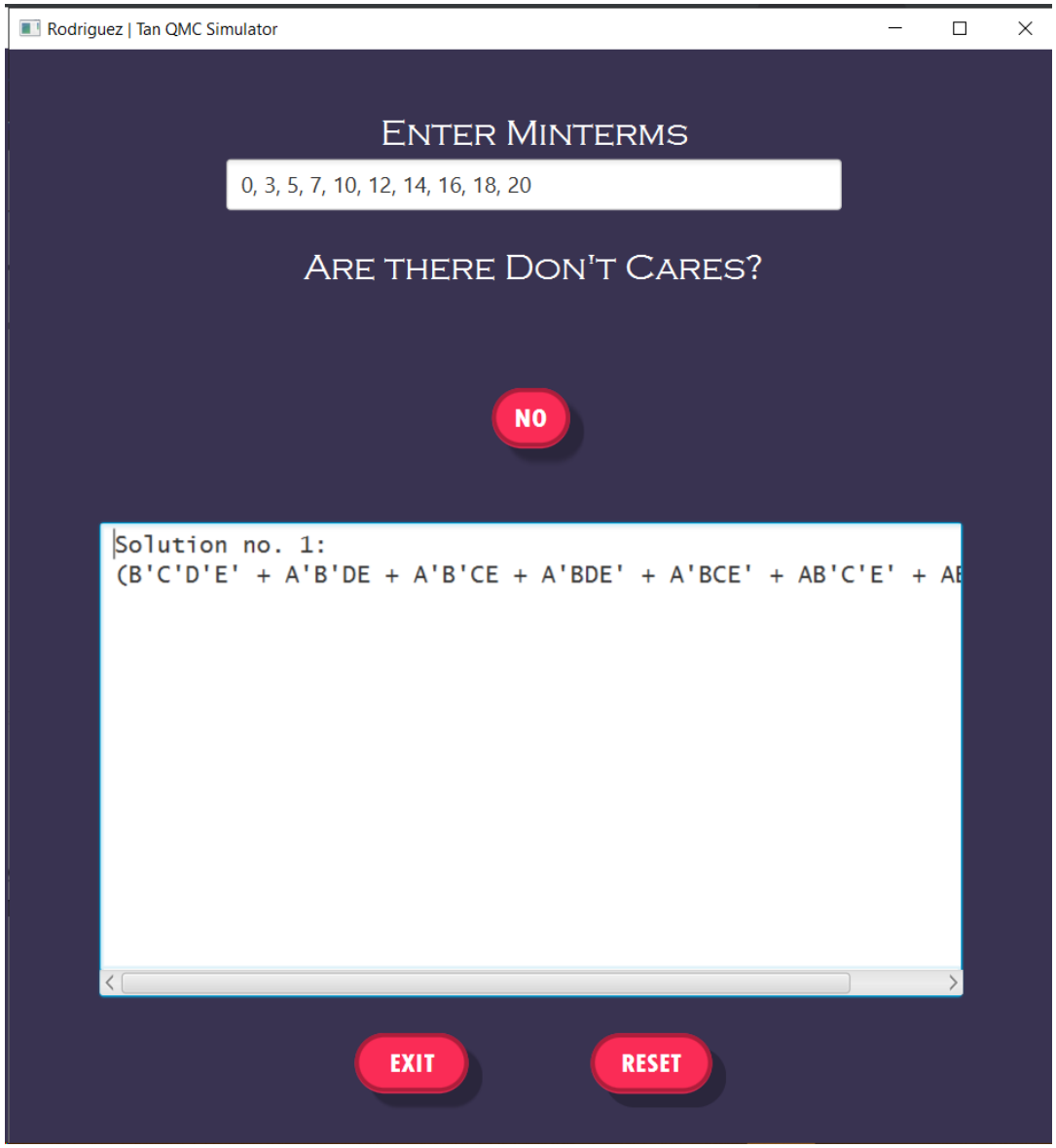
ENTER MINTERMS
0, 3, 5, 7, 10, 12, 14, 16, 18, 20
ARE THERE DON'T CARES?
YES
ENTER DON'T CARES
1, 2, 4, 6, 8, 9, 11, 13, 15, 1
Solution no. 1:
(A' + B')
EXIT
RESET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ENTER MINTERMS
0, 3, 5, 7, 10, 12, 14, 16, 18, 20
ARE THERE DON'T CARES?
NO
Solution no. 1:
(B'C'D'E' + A'B'DE + A'B'CE + A'BDE' + A'BCE' + AB'C'E' + AE
EXIT
RESET