

ALGORITHM

1. **Start the Program**

The program execution begins and control enters the `main()` function to start the quiz application.

2. **Declare Variables**

- Variables are declared to store the user's selected answer.
- A variable is declared to store and update the quiz score.

3. **Initialize Score**

The score variable is initialized to zero so that the scoring starts correctly from the beginning of the quiz.

4. **Display Welcome Message**

A welcome message is displayed on the screen to inform the user about the quiz game.

5. **Store Quiz Questions**

All quiz questions along with their multiple-choice options and correct answers are stored in the program.

6. **Display Question**

Each question is displayed one by one on the console along with its available options.

7. **Accept User Input**

The user is asked to choose an option and the input is read using standard input functions.

8. **Check User Answer**

The selected answer is compared with the correct answer using conditional statements.

9. **Update Score**

If the user's answer is correct, the score is increased; otherwise, the score remains unchanged.

10. **Repeat for All Questions**

The same process is repeated for all questions using a loop until the quiz is completed.

11. Display Final Score

After all questions are answered, the total score obtained by the user is displayed.

12. End the Program

The program displays a completion message and terminates successfully.