```cpp
/*
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Lab 3: Functions and Arrays
Description: In this lab, we implement arrays and functions into one program that makes a user-created quiz
*/
#include <iostream>
#include <string>
using namespace std;

void addQuestion(string&, string&);//This function is used to enter the user's question if they choose to do so
void displayQuiz(string, string);//This function is used to display the user made quiz
char menu(char response);//This displays the menu that is the same as long as they keep adding questions
const int ROWS = 5, COLS = 2;//This is used as the array outline guides


int main()
{
    string q, a;//Varaibles to use for the void functions
    char response{};//To use the user's choice in the menu in the main
    cout << "Welcome to QuizMaker" << endl;
    cout << "Make a quiz up to 5 questions long!" << endl << endl;
    do//This function will iterate until the user enters 5 questions or until they decide to quit out of it
    {
        response = menu(response);//This calls the menu function and updates the choice of the user
        //This is for validating and making sure the user enters either 'a' or 'b'
        if (response == 'a' || response == 'A')
        {//If the user chooses 'a' then it will do the function where it adds a question and answer
            addQuestion(q,a);
        }
        else if (response == 'b' || response == 'B')
        {//If the user enters 'b' then it will stop adding questions and display their quiz in order
            displayQuiz(q,a);
            break;
        }
        else
        {//To make sure they enter either of the two options into the program
            cout << "Invalid Option" << endl << endl;
        }
    } while (ROWS < 6);//As long as there is 5 or less questions made

    system("pause>nul");
    return 0;
}//This function is used to get the user's questions and answer and then put them into an array index respectively
```

```
44  void addQuestion(string &question, string &answer)
45  {
46      string array[ROWS][COLS];
47      cin.ignore();//Removes the previous entry form user
48      cout << "Please Enter Your Question: ";
49      getline(cin, question);//Used to get the full line from the user
50      cout << endl;
51      cout << "Please Enter The Answer: ";
52      getline(cin, answer);//Used to get the answer from the user with the question
53      cout << endl;
54
55  }//This displays the user made quiz from the array index and fills in the empty
      ones with default value
56  void displayQuiz(string question, string answer)
57  {
58      int x;
59      //This is the default values for each array index
60      if (question == "")
61      {
62          question = "Blank Question";
63      }
64      if (answer == "")
65      {
66          answer = "Blank Answer";
67      }
68      cout << "Thank you for using QuizMaker!" << endl << endl;
69      cout << "\tCreated Quiz:" << endl << endl;
70      //This will display the user made question and answers from each array index
71      for (x = 0; x < ROWS; x++)
72      {
73          cout << "Q" << (x + 1) << ": " << question << endl;
74          cout << "A: " << answer << endl << endl;
75      }
76      cout << endl << endl;
77  }//This function is used to display the iterating menu and use their response to
      guide the program
78  char menu(char response)
79  {
80      cout << "What would you like to do?" << endl;
81      cout << "a. Create a Question" << endl;
82      cout << "b. Quit" << endl << endl;
83      cout << "Choice: ";
84      cin >> response;//Receives the user input
85      cout << endl;
86      //The function returns the input so that it's blank every time it calls the
          function
87      return response;
88  }
```