

Task#12

Question#1

Create a class `Student` that contains the following private data members:

- `name`: A string to store the student's name.
- `age`: An integer to store the student's age.
- `marks_arr`: A pointer to an integer array to store the student's marks.
- `arr_size`: An integer to store the size of the `marks_arr` array.

The `Student` class should include the following:

- A constructor to initialize the name, age, marks array, and array size.
- A copy constructor to create a duplicate `Student` object with the same values.
- A function to display the student's details, including their marks.
- A destructor to free the dynamically allocated memory.

Write a `main` function to test the class by:

1. Creating a `Student` object with sample data.
2. Displaying the details of the original `Student` object.
3. Using the copy constructor to create a new `Student` object as a copy of the first.
4. Displaying the details of the copied `Student` object

Question#2

Consider a chef. The chef can make chicken, salad and a special dish. In addition to this, an Italian chef can make pizza, pasta and his own special dish and a Chinese chef can make fried rice. Identify classes and write C++ code and also implement copy constructor.