**Section: B** **Quiz 22** **Roll number:** BSSE23013

***Q1 You are provided with Artist and Genre classes to support a music management system. Artists and genres can exist independently of any specific album. You need to establish an aggregation relationship between the Album class and the Artist and Genre classes.***

```
class Artist {
private:
string name;
string nationality;
public:
Artist(string name, string nationality) {
this->name = name;
this->nationality = nationality;
}
string getArtistName();
string getNationality();
};

class Genre {
private:
string name;
string description;
public:
Genre(string name, string description) {
this->name = name;
this->description = description;
}
string getGenreName();
string getDescription();
};
```

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1. ***Your task is to code for the Album class, demonstrating an aggregation relationship between the Album class and the Artist and the Genre classes. The Album class should include title and duration (in minutes) as private attributes. You need to write a parameterized constructor, destructor, and a display function to present the details of an album, including its title, artist's name, nationality, genre, description, and duration.*** ***(6)***
2. ***Demonstrate this setup in the main function by creating instances of Album and using the display function to show the album details.*** ***(4)***

```
class Album {
    Artist* a;
    Genre* g;
    string title;
    double duration;

Public:
Album(Artist* al, Genre* gl, string title1, double dur){
    a = al;
    g = gl;
    title = title1;
    duration = dur;
}
```

```
~Album() {
    delete a;
    delete g;
    title = "    ";
    duration = 0.0;
}

void display() {
    cout << a->getArtist();
    cout << a->getNationality();
    cout << g->getGenreName();
    cout << g->getDescription();
    cout << title;
    cout << duration;
}
};

int main() {
    Artist a2("Umar", "Pak");
    Genre g2("Classic", "Very Good");
    Album a3(a2, g2, "Good Music", 12.3);
    a3.display();
    return 0;
}
```