Section: B **Quiz 14** **Roll number:** 25012

Q1 You have been given a Director and Genre class to help with the movie management system, Directors and genres can exist independently of any specific movie. You need to establish an aggregation relationship between the Movie class and the Director and Genre classes.

```
class Director {
private:
    string name;
    string nationality;
public:
    Director(string name, string nationality){
        this->name = name;
        this->nationality = nationality;
    }
    string getDirecName();
    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();
};
```

```
int main()
{ Movie movie("a", "0", &dir, &gen)
  Director dir("xyz", "XYZ");
  Genre gen("abc", "ABC");
  Movie movie("abc", "100", &dir, &gen)
  movie.display();
}
```

You need to code only for these questions.

1) ***You need to code for the Movie class showing an aggregation relationship between the Movie class and the Director and the Genre class. The Movie class has title and duration as private attributes. You need to code for parameterized constructor, destructor and display function to display the information of a movie including its title, director's name, nationality, genre, description, and duration.*** ***(6)***

2) ***Demonstrate its use in the main function and display the movie details using the display function.*** ***(4)***

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```
class Movie {
private:
    string title;
    int duration;
    Director *director
    Genre *genre;
public:
    Movie(string title, int duration, Director* dir, Genre *gen)
    { this->title = title;
      this->duration = duration;
      director = dir;
      genre = gen; }
    ~Movie() {
      director = nullptr;
      genre = nullptr; }
```

```
void display()
{ cout << title << endl;
  cout << duration << endl;
  cout << director->getDirecName() <<en
  cout << director->getNationality() <<endl
  cout << genre->getGenreName() <<endl
  cout << genre->getDescription() <<endl
};
```


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