REVISION SET 2 – QUESTION MODIFIED FROM MST 2024, SET A

Adam has a set of incomplete data and codes in JavaScript pertaining to some cinema app. This is as shown in ANNEX A below.

ANNEX A

```
const input = require('readline-sync');
const movieInfo   = ["ABBA", "War", "Doom", "Joker", "Cheers"];
const ratingInfo  = [8.6, 6.3, 7.4, 9.5, 7.9];
const durationInfo= [144, 45, 175, 150, 120];

const address = "45 Orchard";
const rating = 8.5;
const avgDailyRev = 45000;
const maxScreen = 12;
const screen3D = true;
const capacity = 350;
```

Use this information to answer the following questions using the JavaScript template provided. You are to use 'this' keyword where possible.

QUESTION 1:

Use all available information in ANNEX A to create properties in the 'cinema_class' object.

QUESTION 2:

Create a method called 'displayCinema' inside the 'cinema_class' object. It should not have any parameters, and it would use the appropriate properties in the object to display the following output when invoked. Do not hardcode.

```
Starlight, located at 45 Orchard has 12 maximum screenings daily.
```

Invoke the method to display the desired output, as shown above.

QUESTION 3:

Create a method called 'displayMovie' inside the 'cinema_class' object. It should use the appropriate property in the 'cinema_class' to display the movie titles. The desired output is as shown below. Do not hardcode.

```
No.    Movie Title
1.     ABBA
2.     War
3.     Doom
4.     Joker
5.     Cheers
```

Invoke the method to display the desired output, as shown above.

QUESTION 4:

Create a method called 'displayRating' inside the 'cinema_class' object. The method should prompt the user for a numeric input (based on the numeric index ordering in Question 3), and it should display the appropriate movie rating. You are to use the necessary properties in 'cinema_class' to do so. Your method, when invoked, should produce the following output.

```
Enter a movie number (1-5) to check the rating : 1
ABBA has a rating of 8.6
```

Invoke the method to display the desired output, as shown above.

QUESTION 5:

Create a method called 'displayConvertDuration' inside the 'cinema_class' object. The method, when invoked, should prompt and receive a user input on the movie name and then display the movie in terms of hr(s) and/or min(s), where appropriate. Three examples of the desired output are as shown below.

You may assume that user will key in the correct movie name. Your method should use the appropriate properties in 'cinema_class', and **RETURN** the string with the parsed movie duration.

```
Enter a movie name for the duration : ABBA
ABBA is 2hr(s), and 24min(s).
```

```
Enter a movie name for the duration : War
War is 45min(s)
```

```
Enter a movie name for the duration : Cheers
Cheers is 2hr(s)
```

Invoke the method to display the desired output(s), as shown above.

QUESTION 6:

Create a method called 'compareRating' in the 'cinema_class' object. The method should use the necessary properties in the object to **RETURN** the following string output as shown below. Do not hardcode.

```
Movie War has the lowest rating of 6.3
Average rating is 7.94
Difference is 1.64
```

Invoke the method to display the desired output(s), as shown above.

QUESTION 7:

Create a function called 'displayMenu' that is not part of the 'cinema_class' object. This function should use all the necessary properties and methods in the 'cinema_class' to generate a user interface that keeps displaying the menu, prompt for user input, and then produce the necessary output. Some form of data validation is necessary, and you are free to choose any methods to do so. You are to use case-switch expression as selection statements in your code. The user interface should keep running till the user choose to exit. Do not hardcode.

Sample outputs are as shown in ANNEX B below.

ANNEX B

SAMPLE 1: SELECT OPTION 1

```
Menu:
1. Cinema Details
2. Movie Titles
3. Display Rating
4. Convert Duration
5. Compare Rating
0. Exit

Enter an option 1-5, or 0 to exit: 1
Starlight, located at 45 Orchard has 12 maximum screenings daily.
```

SAMPLE 2: SELECT OPTION 2

```
Menu:
1. Cinema Details
2. Movie Titles
3. Display Rating
```

```
4. Convert Duration
5. Compare Rating
0. Exit

Enter an option 1-5, or 0 to exit: 2
No.    Movie Title
1.     ABBA
2.     War
3.     Doom
4.     Joker
5.     Cheers
```

SAMPLE 3: SELECT OPTION 3

```
Menu:
1. Cinema Details
2. Movie Titles
3. Display Rating
4. Convert Duration
5. Compare Rating
0. Exit

Enter an option 1-5, or 0 to exit: 3
No.    Movie Title
1.     ABBA
2.     War
3.     Doom
4.     Joker
5.     Cheers
Enter a movie number (1-5) to check the rating : 1
ABBA has a rating of 8.6
```

SAMPLE 4: SELECT OPTION 4

```
Menu:
1. Cinema Details
2. Movie Titles
3. Display Rating
4. Convert Duration
5. Compare Rating
0. Exit

Enter an option 1-5, or 0 to exit: 4
Enter a movie name for the duration : ABBA
ABBA is 2hr(s), and 24min(s).
```

SAMPLE 5: SELECT OPTION 5

```
Menu:
1. Cinema Details
```

```
2. Movie Titles
3. Display Rating
4. Convert Duration
5. Compare Rating
0. Exit

Enter an option 1-5, or 0 to exit: 5
Movie War has the lowest rating of 6.3
Average rating is 7.94
Difference is 1.64
```

SAMPLE 6: SELECT INVALID OPTION

```
Menu:
1. Cinema Details
2. Movie Titles
3. Display Rating
4. Convert Duration
5. Compare Rating
0. Exit

Enter an option 1-5, or 0 to exit: 7
Invalid choice, please re-enter 0 to 5 only
```

SAMPLE 7: SELECT OPTION 0

```
Menu:
1. Cinema Details
2. Movie Titles
3. Display Rating
4. Convert Duration
5. Compare Rating
0. Exit

Enter an option 1-5, or 0 to exit: 0
Goodbye
```