

CSE3003 OBJECT ORIENTED PROGRAMMING

(Fall 2022- 2023)

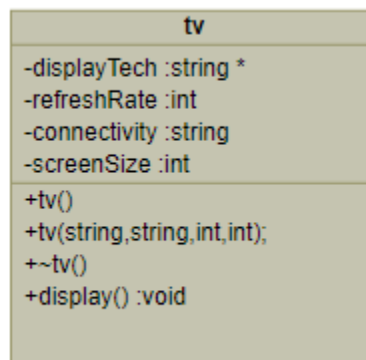
Lab 09 Exercise: Pointers

Define the class and functions according to the explanations given below. The Calculate Price function is **not a member function**. You must complete the lines specified as comments in the main function given to you, according to the sample output.

```
float* calculatePrice(string* , int);
```

This function calculates the price of TV according to displayTech and screenSize and returns a pointer. If displayTech is undefined and screenSize 0, price is 0. If displayTech is LED and screen size greater than 32, price is 12500. For all other conditions, price is 10000.

TV Class:



displayTech is a pointer data member. Examples of TV display technology: LCD, LED, QLED etc.

Refresh rate is the number of times per second TV can reset and display an image. It's measured in Hz. Ex: 60,120 etc.

connectivity:

- Bluetooth
- Ethernet
- HDMI
- USB
- VGA
- Wi-Fi etc.

screenSize: A TV's size refers to its diagonal length, measured from the upper left-hand corner of the actual TV screen to the lower right-hand corner. Most TV sizes are expressed in inches.

Ex: 32,43 etc.

display(): Method should display all information about TV. In addition, calculatePrice() function must be called in this method. By calling the calculatePrice function we can get the price and display it.

```
int main() {  
    //create an object of tv  
    cout << "*****1. TV*****" << endl;  
    //call display function of first tv object  
    //create second object of tv with given values (Display tech = LED,Connectivity = HDMI,Refresh rate = 60 and Screen Size = 32)  
    cout << "*****2. TV*****" << endl;  
    //create a pointer of tv and assign address of second object to this pointer  
    //call display function for second object using this pointer.  
    return 0;  
}
```

```
*****1. TV*****  
Display Tech: undefined  
Refresh Rate: 0  
Connectivity: undefined  
Screen Size: 0  
Price: 0  
*****2. TV*****  
Display Tech: LED  
Refresh Rate: 60  
Connectivity: HDMI  
Screen Size: 32  
Price: 10000
```