CSE 114 - Fundamentals of Computer Programming
Assignment 2
Due: 26.03.2021, 11:59 PM

In this assignment, you are going to implement a C program that calculates the **yearly** membership cost for streaming services which are 'N' for Netflix, 'A' for Amazon Prime, and 'H' for HBO.

You will implement a program that gets the streaming service type as a **char** and the number of devices in which s/he can watch as an **int** and prints the **yearly** membership cost.

Write three separate functions for calculating the **yearly** membership cost:
streaming_a, streaming_n, streaming_h.

'A' streaming service costs **monthly** 7.99 $ if the number of devices is less than or equal to 2,
12.99 $ otherwise.

'N' streaming service costs **monthly** 12.99 $ if the number of devices is less than or equal to 3,
14.99 $ if 4 <= number of device < 7,
24.99 $ otherwise.

'H' streaming service costs **monthly** 14.99 $ if the number of devices is less than or equal to 4,
24.99 $ if 5 <= number of device < 10,
34.99 $ otherwise.

Table 1: How to calculate **monthly** cost for different streaming services

Read *streaming service type* and *number of devices* in the main function and call the appropriate function to find **yearly** membership cost. Print the found **yearly** membership cost.

In this assignment, you will implement 3 functions and the main function.

- **Function 1:**
  - **Name of the function:** streaming_a
  - **Return type of the function:** double
  - It takes 1 int parameter
  - Use *Table 1* to understand how it should calculate the **yearly** cost.

- **Function 2 :**
  - **Name of the function:** streaming_b
  - **Return type of the function:** double
  - It takes 1 int parameter
  - Use *Table 1* to understand how it should calculate the **yearly** cost.

- **Function 3 :**
  - **Name of the function:** streaming_c
  - **Return type of the function:** double
  - It takes 1 int parameter
  - Use *Table 1* to understand how it should calculate the **yearly** cost.

- **In the main function:**
  - Ask number of devices and streaming service type from the user.
  - Call the correct streaming function depending on the type of the streaming to find yearly membership cost (double).
  - Print yearly membership cost.
  - Use the `"%.2lf"` format to print the value of a double variable after the decimal point.

WARNING:
- **DO YOUR OWN WORK.**
- Submit only the source file in the format **assignment1_name_surname.c**
- Be sure the extension of your file is **.c**. If you do not know how to check the extension please look at the file ("How to run your code?") on the COADSYS.
- Do <u>not</u> use any library other than stdio.
- Do <u>not</u> use any loop or array structure.

Input/output examples:

```
Enter number of devices and streaming service: 12 A
yearly membership cost for A: 155.88$
```

```
Enter number of devices and streaming service: 3 H
yearly membership cost for H: 179.88$
```