

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 "%.21f" 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 not use any library other than stdio.
- Do not 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$
```