

22 September 2019

## Lab01 Schedule

The algorithm I used for this program utilized the indices of both arrays to match up the hours and activities. I stored the information from the text file into two arrays. One array had all the hours and the other had all the activities. After the schedule was saved, the user would be prompted to either search by number or activity. There was a for loop dedicated to each choice. Each for loop would go through the array and find the number or activity the user entered. This was done using a variable labelled “i”. This is to keep track of the location in the array the match was found. Directly after the match was found, the value stored at the same index of the other array would be printed out. When saving the information from the text file, the order does not change. This means that the number and activity at each index of each array correspond.

```

Pseudocode - Notepad
File Edit Format View Help
Print a menu to prompt user for input
{
    option 0: Exit
    option 1: Search by number
    option 2: Search by activity
}

int main() {
    open the text file
    for loop to go through entire text file:
        store time in the time array
        store activity in the activity array

    take user input by calling printMenu function

    if user selected option 1:
        prompt number from user:
        store input from user
        for loop to go through the number array:
            check each index until the number is found
            cout the the activity from the activity array at the same index

    if user selected option 2:
        prompt activity from user
        store input from user
        for loop to go through the activity array:
            check each activity until the right one is found
            cout the the number at the same index from the number array
}
}

```

