



Intro to Programming COEN 10

Lab 10 – Ski Lessons

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Lab 10 – Ski Lessons

- Your program schedules ski lessons
- The ski instructor has lessons at
 - 1pm, 2pm, 3pm, 4pm, 5pm

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Lab 10

- Interface
 - The user can use the system to
 - (1) Request a lesson
 - (2) Cancel a lesson
 - (3) List the lessons
 - (4) Show names starting with a letter
 - (5) Show groups with a number of people
 - **(6) Priority**
 - **(7) Count letters**
 - (9) Quit
 - Any other number, report and ignore

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Lab 10

- New
 - Priority, option 6
 - Create a new function
 - Read a name, phone, group size
 - Reserve the lesson at 1pm
 - Shift everyone to later times
 - If the schedule is full, cancel the last one
 - Show each changed time or canceled lesson to the user
 - This can only happen once
 - Control that in main

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Lab 10

- New
 - Count letters, option 7
 - Input a letter
 - Count the number of occurrences in all the names

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Lab 10

- Count a letter
 - Use a pointer to traverse each string when counting the occurrences of the character given
 - Your function will receive the letter as an **argument** (`scanf` in main) and **return** the final counter, which will be output (`printf`) in main
 - Declaring function (prototype) `count_letter`:
`int count_letter (char);`

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- Count a letter
 - In main, calling count_letter:

```
printf ("letter? ");
scanf (" %c", &letter);
      ^
number = count_letter (letter);
printf ("found %d occurrences of %c\n", number, letter);
```

Attention for the trailing blank in the format. It tells scanf to ignore any leading whitespace-like inputs (including the previously stored \n). It caused by the previous ENTER key press that generates a newline \n, which is a valid input for %c.

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Lab 10

- When you are done
 - Demo
 - Execute your code on the terminal to the TA
 - Submit
 - Submit the source code to Camino
 - Don't forget to put your name on it!

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End

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