

This lab will give you practice to prepare for the lab final on Tuesday 5/10.

During this lab you may request help from the lab assistants or instructor. However, during the actual lab final you will need to complete the tasks on your own.

**Task1a:** A random weather forecast consists of the anticipated temperature (60 to 90 degrees, inclusive) and weather conditions (sunny, raining, or windy). Use a for loop to generate 5 random weather forecasts: Sample output:

```
67 degrees and sunny
87 degrees and windy
85 degrees and raining
62 degrees and raining
82 degrees and sunny
```

**Task1b:** Copy the code from task1a. Use a while loop to generate weather forecasts until the weather is nice enough for an outdoor picnic. Announce it is time for an outdoor picnic when it is sunny and at least 75 degrees. Sample output:

```
67 degrees and sunny
68 degrees and sunny
68 degrees and sunny
66 degrees and raining
86 degrees and raining
60 degrees and sunny
62 degrees and sunny
78 degrees and windy
82 degrees and sunny
Outdoor picnic!
```

**Task2a:** Write a function that helps with online shopping by providing a purchase recommendation ('add to cart', or 'keep browsing') based on the product rating and shipping policy. Define a function named **purchase\_product** that takes two parameters: (1) the average numeric product rating and (2) a string describing the shipping policy. If the average rating is at least 3 and the shipping policy is 'free' or 'next day', the function should return the string 'add to cart'. A rating below 3 or any other type of shipping should result in the recommendation 'keep browsing'.

Implement the function using a single non-nested if/else statement. Do not use nested or chained conditional statements. You may use the logical operators and, or, not.

**Task2b:** Implement another version of the function named **purchase\_product\_V2** that does not use the logical operators and, or, not. You may use nested or chained conditionals.

**Task3** Prompt the user to enter a starting number and an ending number. Use a **for loop** to print all multiples of 5 between the starting number and ending number (inclusive). Your code should handle the situation of the starting number being less than the ending number, as well as the starting number being greater than the ending number. Sample input and output:

<pre>start:10 end:30 10 15 20 25 30</pre>	<pre>start:2 end:29 5 10 15 20 25</pre>	<pre>start:99 end:50 95 90 85 80 75 70 65 60 55 50</pre>
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#### Task4:

Create a function named **dailygoal\_per\_week** that takes a nested list as a parameter. You may assume all rows in the nested list have the same length.

Each row represents a week of cookie sales. Each cell stores the cookie sales for one day.

Each scout has a daily sales goal of 3 cookie boxes.

The function should print a count of the number of days the sales goal was met each week (row).

Test your function with the sample test cases.

**EXPECTED OUTPUT:**

Testing scout #1

Week 0 goal met 3 days

Week 1 goal met 2 days

Week 2 goal met 0 days

Testing scout #2

Week 0 goal met 4 days

Week 1 goal met 1 days