Five Scientists including Bob, have been credited with discovering five new planets (one was named Argo), at the Observatory last week (each on a different day including Monday). If each scientist discovered his own planet and each on separate days, from the clues provided below can you determine which scientist discovered which planet and on which day?

**CLUES:**

- Carl and Igor discovered their planets, Sargo and Bargo (in some order), on consecutive days, but not starting Monday.
- Bob did not discover Fargo, which was discovered sometime later in the week, after Bob's discovery.
- Argo was discovered before Bargo, but after Margo.
- Edie discovered her planet the very next day after Bob's discovery, she did not find Margo.
- Sargo was discovered last.
- Carl discovered his planet 3 days after Bob.
- The day of Max's discovery, Margo and Argo had already been found.

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<th>PLANETS</th>
<th>Argo</th>
<th>Bargo</th>
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Bob-Margo-Monday.
Carl-Bargo-Thursday.
Edie-Argo-Tuesday.
Igor-Sargo-Friday.
Max-Fargo-Wednesday.

**step-by-step**

- Lets look at the first clue *"Carl and Igor discovered their planets Sargo and Bargo (in some order), on consecutive days but not starting Monday."*
  - First find 'Carl' and Igor in the grid, we are given that between the two scientists they discovered -Sargo & Bargo, to the exclusion of the other scientists, thus we can make the following grid square eliminations:
    
    [Carl-Argo, Carl-Fargo, Carl-Margo, Igor-Argo, Igor-Fargo, Igor-Margo] as well as
    [Bob-Bargo, Bob-Sargo, Edie-Bargo, Edie-Sargo, Max-Bargo, Max-Sargo].

  - For the second part (*".... not starting Monday"*), we locate the grid squares
    [Carl-Monday, Igor-Monday] and place 'red xx' in those squares.

- *"Bob did not discover Fargo which was discovered sometime later in the week after Bob's discovery".*
  - To begin simply eliminate grid square [Bob-Fargo].
  - Next locate and eliminate [Monday-Fargo], because "....Fargo was discovered ....later in the week".
  - It is also possible to eliminate [Bob-Friday], because "......Fargo was discovered...after Bob's discovery."

- *"Argo was discovered before Bargo , but after Margo."*
  - Eliminate [Argo-Friday] because it was 'before Bargo' and
  - Eliminate [Argo-Monday] because it was 'after Margo'. Also
  - Eliminate [Margo-Friday] because it was 'before Argo'. Lastly
Eliminate [**Bargo-Monday, Bargo-Tuesday**] because it was after BOTH Argo & Margo.

- **"Edie discovered her planet the very next day after Bob's discovery, she did not find Margo."**
  - Eliminate [**Edie-Monday**] because it was 'after Bob's discovery'.
  - Eliminate [**Edie-Margo**] because she did not find Margo.

- **"Sargo was discovered last."**
  - Locate grid square [**Fri-Sargo**] as 'last', can only mean 'Friday'.
  - Also make these eliminations: [**Fri-Bargo, Fri-Fargo**] as well as [**Mon-Sargo, Tue-Sargo, Wed-Sargo, Thu-Sargo**]
  - This also means Margo was discovered first, locate and fill in a 'green box' for [**Mon-Margo**], and eliminate [**Tue-Margo, Wed-Margo, Thu-Margo**]

- **"Carl discovered his planet 3 days after Bob."**
  - From this clue we deduce that Bob discovered his planet *either* on **Monday (Carl-Thursday)** or **Tuesday(Carl-Friday)**.
  - Make the following grid square eliminations: [**Bob-Wed, Bob-Thu, Bob-Fri**] and [**Carl-Mon, Carl-Tue, Carl-Wed**]
  - It is also true since Bob's discovery was either monday or tuesday, edie's discovery must be tuesday or wednesday, therefore eliminate [**Edie-Thu, Edie-Fri**].

- **"The day of Max's discovery Margo and Argo had already been found."**
  - This clue is really telling us that 'Max' discovered **NEITHER** of these planets.
  - So locate grid squares [**Max-Argo, Max-Margo**] and fill with 'red xx'.
  - Max could have only discovered Fargo, therefore set grid [**Max-Fargo**] to 'green' (which in turn eliminates [**Edie-Fargo**]),
  - Which in turn means [**Edie-Argo**] is highlighted to 'green', from which it follows that the grid square [**Bob-Argo**] is eliminated, leaving only [**Bob-Margo**] as the correct solution for Bob's row.
Of the possible days for Bob-Margo, only Monday is correct, and this also means Edie's day was 'tuesday'("the very next day after Bob's discovery") therefore these grid squares [Bob-Mon, Mon-Margo, Edie-Tue] are highlighted 'green' (while eliminating Edie-Wed, Bob-Tue, Igor-Tue, Max-Mon, Max-Tue)

(Now that we know Bob's discovery day we also know Carl's "....three days after Bob") So highlight in 'green' grid square[Carl-Thu], while eliminating [Carl-Fri, Igor-Thu, Max-thu]

We now have more eliminations including [Carl-Sargo], because remember "Sargo was discovered Last" (friday). If Carl did not discover Sargo, he could have only discovered Bargo( "Carl and Igor discovered their planets, Sargo and Bargo")

Leaving Igor to discover Sargo, so lets fill in the grid squares [Carl-Bargo, Igor-Sargo], and make further eliminations including: [Igor-Bargo, Igor-Wed], Leaving grid square [Igor-Fri] to be highlighted 'green' (while eliminating [Max-Fri], and and eliminate [Wed-Bargo, Thu-Argo, Thu-Fargo].

Also Eliminate [Max-Fri], leaving grid square: [Max-Wed] to be highlighted 'green', from which the remaining grid squares[Tue-Argo, Wed-Argo, Tue-Fargo, Wed-Fargo] can be deduced.

• Congratulations! Puzzle solved. To summarize:

Bob discovered the planet **Margo** on **Monday.**
Carl discovered the planet **Bargo** on **Thursday.**
Edie discovered the planet **Argo** on **Tuesday.**
Igor discovered the planet **Sargo** on **Friday.**
Max discovered the planet **Fargo** on **Wednesday.**