

# Solution Guide: grep

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- The first step is to navigate into the folder on your VM where the recipes are located. To do this, run the following commands:

- `cd /03-student/day2/`
- `cd finding_your_way/`
- `cd PeanutButtery.net/other/disregard/wonkasecretrecipes`

- We need to search for recipes containing the ingredient "guavaberries." The command to search for them in this directory is:

- `grep -i guavaberries *`
  - `grep` : The command being run.
  - `-i` : An option for `grep` indicating case insensitivity.
  - `guavaberries` : The specific data point being searched for.
  - `*` : A wildcard, indicating the command should search through all files in the current directory.

- After running the command, the results show four files containing "guavaberries":

- `recipe_crunchybars:5 guavaberries`
- `recipe_peanutballs:4 guavaberries`
- `recipe_peanutsquares:8 guavaberries`
- `recipe_yumbars:2 guavaberries`

- These results show the file names of all recipes that include guavaberry as an ingredient, followed by a colon and the line in which "guavaberries" appears.

## Bonus

- We will adjust the `grep` command to search for files that also contain the word "optional," indicating that the guavaberries are an optional ingredient.

The command to search for multiple data points in a file is:

- `grep -i 'guavaberries\|optional' *`

- `grep` : The command being run.
  - `-i` : Option for `grep` indicating case insensitivity.
  - `guavaberries` : The first specific data point being searched for.
  - `\|` : Indicates OR.
  - Included between values to search for multiple values using one command.
  - `optional` : The second data point being searched for.
  - `*` : A wildcard indicating the command should search through all files in the current directory.
- Run the command and notice the results show all four files, but five lines contain guavaberries OR the word "optional": *recipecrunchybars:5 guavaberries*  
*recipepeanutballs:4 guavaberries* *recipepeanutsquares:8 guavaberries*  
*recipepeanutsquares: Note: optional - another berry that can be substituted is blueberries*  
*recipe\_yumbars:2 guavaberries*
  - This shows that `recipe_peanutsquares` has an "optional" note stating that blueberries can substitute guavaberries.
  - This shows that Wonka should be the most concerned about the Peanut Squares recipe, as Slugworth can make this without guavaberries.