Take Home Questions:

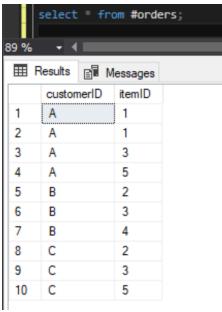
1. <u>Python exercise</u>: Create a python function *ascii_density_histogram()* that takes a list of numbers as input and returns (or prints out) a density histogram plotting the distribution of the numbers in the list. Use only base python functions (i.e. the word *import* must not appear in your code).

Here is an example of the desired behaviour of the function:

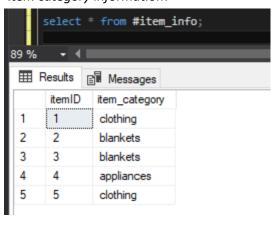
The output of your function needn't look exactly like this, this is just an example. You are welcome to be creative with your design.

2. <u>SQL exercise</u>: Given a table of *customer order counts* and a table containing *item category information*, write a SQL query which returns a count of orders per customer per item category. You can expect the *order counts* table to have a few million rows. For illustration, here is an example using small toy tables:

Customer order counts:



Item category information:



Desired output of SQL query:

