

Upgrade grade

Write a program that input a list of student ID and grade, follow by a list of student ID that receive grade upgrade by one level (From B+ to A, from B to B+ from C+ to B,...)

Input

Consist of 2 parts

- First part has multiple line as a list of student ID and grade, one line per student, this part end on the line with q letter
- Second part has one line as a list of student ID (separate by space) that receive upgrade by one level

Output

A list of student ID and grade (After upgrade) of every students, one line per student, in the same order as input.

Example

Input(from keyboard)	Output(On screen)
44444 A 22222 F 11111 B+ 66666 C 55555 B 33333 D+ q 33333 22222 55555	44444 A 22222 D 11111 B+ 66666 C 55555 B+ 33333 C

Hint

From example above, we can turn all input data into 3 lists

- ids = ['44444', '22222', '11111', '66666', '55555', '33333']
- grades = ['A', 'F', 'B+', 'C', 'B', 'D+']
- uids = ['33333', '22222', '55555']

Use student ID from **uids** to find it in **ids** and identify the slot number (by using index method), then use it to change grade of that slot number in **grades**.

For example, **'33333'** is on 5th slot of **ids**, grade of that student will also be on 5th slot **grades**.