



Question - 1
Change the numbers to their opposite

What is the opposite of a number?

- The opposite of 4 is -4
- The opposite of -3 is 3
- The opposite of 0 is 0

To do

You have a list of numbers as input
You need to change the numbers to their **opposite** if this number is between 10 and 35 or between -35 and -10

Input

ARRAY of integers

Output

ARRAY of integers

Example

INPUT	OUTPUT
[-15,12,5]	[15, -12, 5] <i>Because -35<=-15<=-10 10<=12<=35 5 is not between 10 and 35.</i>
[]	[]
[-6, 10, -35, 36]	[-5, -10, 35, 36] <i>Because -6 is not between -35 and -10. 10<=10<=35 -35<=-35<=-10 36 is not between 10 and 35</i>

Question - 2
Replace number in array by the sign

- Replace number in the array 2D:
- If the number is less than 3 replace it with “#”
 - If the number is greater or equal to 6 AND less than 9 replace it with “@”

- If the number is negative replace it with "\$"

Input

- An array 2D

Output

- An array 2D

INPUT	OUTPUT
[[1, 3, 8], [4, 9, 5], [12, 3, -7],]	[['#', 3, '@'], [4, 9, 5], [12, 3, '\$']]
[[1, -3, -8], [4, -9, 5], [-12, 3, -7],]	[['#', '\$', '\$'], [4, '\$', 5], ['\$', 3, '\$']]

Question - 3

Collect the numbers from the array of integers

As input : an array of numbers.

Create a new array of numbers, where you collect the numbers from the initial array

as long as the total sum of those numbers is not greater or equal to 100

Important :

- If - at the end - the total sum of all the elements of the array integer **is not greater or equal to 100**, then just display an empty array.

Input

ARRAY

Output

ARRAY

Example:

INPUT	OUTPUT
[50, 80, 3, 18]	[50, 80] We stopped at 80 Because $50+80 = 130 \geq 100$
[120, 200, 12, 78]	[120] We stopped at 120 because $120 \geq 100$
[40, 60, 20, -80, -5]	[40, 60]

	Because $40+60 = 100 \geq 100$
[5, 10, 50]	[] Because $5+10+50 = 65 < 100$

Question - 4

[ARRAY] Add a column with minor/major

PROBLEM

A table contains a list of first name and last names and ages of different people:

First	Last	Age
Ronan	Ogor	22
Jonathan	Faucher	17
Sievny	Nav	08
Seiha	Hi	86

We represent it in Python as follow:

```
[
["ronan", "Ogor", 22],
["Jonathan", "Faucher", 17],
["Sievny", "Nav", 8],
["Seiha ", "Hi", 86]
]
```

We want to add a new column, to know if the person is major (≥ 18) or minor (< 18)

First	Last	Age	Status
Ronan	Ogor	22	major
Jonathan	Faucher	17	minor
Sievny	Nav	08	minor
Seiha	Hi	86	major

So the result will be:

```
[
["ronan", "Ogor", 22, "major"],
["Jonathan", "Faucher", 17, "minor"],
["Sievny", "Nav", 8, "minor "],
["Seiha ", "Hi", 86, "major "]
]
```

INPUT

- Array of person (first name + last name + age)

OUTPUT

- Array of person (first name + last name + age + **minor/major**)