



Linq Tasks

1. Numbers from range

Given an array of integers, write a query that returns list of numbers greater than 30 and less than 100.

Expected input and output

[67, 92, 153, 15] → 67, 92

2. Minimum length

Write a query that returns words at least 5 characters long and make them uppercase.

Expected input and output

["computer", "usb"] → "COMPUTER"

3. Select words

Write a query that returns words starting with letter 'a' and ending with letter 'm'.

Expected input and output

["mum", "amsterdam", "bloom"] → "amsterdam"

4. Top 5 numbers

Write a query that returns top 5 numbers from the list of integers in descending order.

Expected input and output

[78, -9, 0, 23, 54, 21, 7, 86] → 86 78 54 23 21

5. Square greater than 20

Write a query that returns list of numbers and their squares only if square is greater than 20

Expected input and output

[7, 2, 30] → 7 - 49, 30 - 900

6. Replace substring

Write a query that replaces 'ea' substring with astersik (*) in given list of words.



Expected input and output

`["learn", "current", "deal"] → "l*rn", "current", "d*l"`

7. Last word containing letter

Given a non-empty list of words, sort it alphabetically and return words that contain letter 'e'.

Expected input and output

`["plane", "ferry", "car", "bike"] → "plane"`

8. Shuffle an array

Write a query that shuffles sorted array.

```
var rnd = new Random();  
var array = new[] { 1, 2, 3, 4, 5, 6, 7, 8, 9, 10 };  
var shuffledArray = array.OrderBy(i => rnd.Next());
```

Expected input and output

`[1, 2, 3, 4, 5, 6, 7, 8, 9, 10] → [4, 9, 3, 5, 2, 10, 1, 6, 8, 7]`

`[38, 24, 8, 0, -1, -17, -33, -100] → [0, -100, -17, 38, 8, -1, 24, -33,]`