Advanced Programming Techniques
HW#1 -- Array methods

1. SORU

Range Metodu

```
 1  function range(start, end,optinal) {
 2    var arr = [];
 3     if (optinal === undefined) {
 4         for (let i = start; i <= end; i++) {
 5           arr.push(i);
 6       }
 7       return arr;
 8       }else{
 9       var ans=start;
10       for (let i = start; ans >= end; i--) {
11           arr.push(ans);
12           ans+=optinal;
13       }
14       return arr;
15       }
16  }
17
```

Sum metodu ve kodun çıktısı

```
18  function sum(array) {
19    let total=0;
20       for (let i =0; i < array.length; i++) {
21           total+=array[i];
22       }
23       return total;
24  }
25
26  console.log(range(1, 10));
27  // → [1, 2, 3, 4, 5, 6, 7, 8, 9, 10]
28  console.log(range(5, 2, -1));
29  // → [5, 4, 3, 2]
30  console.log(sum(range(1, 10)));
31  // → 55
```

```
[1, 2, 3, 4, 5, 6, 7, 8, 9, 10]
[5, 4, 3, 2]
55
```

**İstenen çıktılar elde edildi

2.Soru

Kod ve çıktısı bu şekildedir.

```javascript
function analyze(min = 0) {
    return [...EVENTS]
        .map(e => ({ evt: e, cor: phi(tableFor(e)) }))
        .filter(x => Math.abs(x.cor) > min)
        .map(x => x.evt + ": " + x.cor.toFixed(4) + " " + (tableFor(x.evt)[1] + tableFor(x.evt)[3]));
}
```

```
> analyze();
< (26) ['carrot: 0.0141 16', 'exercise: 0.0686
  e: -0.0808 9', 'nachos: -0.0704 7', 'cycling
  0', 'candy: 0.1296 6', 'dentist: -0.0366 2',
  asagna: 0.0808 9', 'lettuce: -0.0704 7', 'te
    0: "carrot: 0.0141 16"
    1: "exercise: 0.0686 10"
    2: "weekend: 0.1372 30"
    3: "bread: -0.0758 8"
    4: "pudding: -0.0648 6"
    5: "brushed teeth: -0.3805 64"
    6: "touched tree: -0.0808 9"
    7: "nachos: -0.0704 7"
    8: "cycling: -0.0808 9"
    9: "brussel sprouts: -0.0523 4"
    10: "ice cream: -0.0808 9"
    11: "computer: 0.0686 10"
    12: "potatoes: -0.0857 10"
    13: "candy: 0.1296 6"
    14: "dentist: -0.0366 2"
    15: "running: -0.0905 11"
    16: "pizza: 0.0686 10"
    17: "work: -0.1372 60"
    18: "beer: -0.0523 4"
    19: "cauliflower: -0.0808 9"
    20: "lasagna: 0.0808 9"
    21: "lettuce: -0.0704 7"
    22: "television: -0.0808 9"
    23: "spaghetti: 0.2425 9"
    24: "reading: 0.1107 7"
    25: "peanuts: 0.5903 13"
    length: 26
  ▶ [[Prototype]]: Array(0)
>
```

3.Soru

- **JOURNAL.map(e => e.squirrel);**

- **JOURNAL.forEach(e => console.log(e.events.toString()));**

- **JOURNAL.filter(e => e.squirrel).map(e => e.events).reduce((a, b) => a.concat(b)).filter((e, i, a) => a.indexOf(e) == i).sort().forEach(e => console.log(e));**

```
> JOURNAL.map(e => e.squirrel);
<   (90) [false, false, false, false, false, false, false, false, false, false, false, false, false, false, false,
    lse, false, false, false, true, false, false, false, false, false, false, false, false, false, false, false, fa
  ▶ e, false, false, false, false, false, true, false, false, false, false, false, false, false, false, false, fals
    false, false, false, false, false, false, false, false, true, false, false, false, false, false, false, false,
    se, false]
```

```
> JOURNAL.forEach(e => console.log(e.events.toString()));
  carrot,exercise,weekend
  bread,pudding,brushed teeth,weekend,touched tree
  carrot,nachos,brushed teeth,cycling,weekend
  brussel sprouts,ice cream,brushed teeth,computer,weekend
  potatoes,candy,brushed teeth,exercise,weekend,dentist
  brussel sprouts,pudding,brushed teeth,running,weekend
  pizza,brushed teeth,computer,work,touched tree
  bread,beer,brushed teeth,cycling,work
  cauliflower,brushed teeth,work
  pizza,brushed teeth,cycling,work
  lasagna,nachos,brushed teeth,work
  brushed teeth,weekend,touched tree
  lettuce,brushed teeth,television,weekend
  spaghetti,brushed teeth,work
  brushed teeth,computer,work
  lettuce,nachos,brushed teeth,work
```

```
> JOURNAL.filter(e => e.squirrel).map(e => e.events).reduce((a, b) => a.concat(b)).filter((e, i, a) => a.indexOf(e) == i).sort().forEach(e =
  candy
  carrot
  computer
  exercise
  lasagna
  peanuts
  pizza
  reading
  spaghetti
  weekend
  work
< undefined
  -
```

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