Name: Ahmed Tarek Ashour Mahmoud

ID: 20192634

Angular js sample exam

Question (1):

1- The event loop is a single threaded loop that checks if there is any code to run in the task queue and it is responsible for:

- Collecting and processing events, executing the code and executed the queued sub tasks.

2- By using the unshift() method or push method().

Question (2):

1- The output will be 3
2- The output is 5 5 5 5 5
3- Not defined
4- 1 hello true
5- True
   carName Bmw
   carPrice 1000000

Question (3):

```
const obj = {
  one: 2,
  two: 5,
  three: 18,
};

const values = Object.values(obj);

const sum = values.reduce((accumulator, value) => {
  return accumulator + value;
}, 0);

console.log(sum);
```

```
console.log('1')

setTimeout(function afterTwoSeconds() {
  console.log('2')
}, 2)

console.log('3')
```

3

3- Get the maximum value from a numbers array along with its index

```
const arr = [3, 5, 8, 100, 20];

const max = Math.max(...arr);

const index = arr.indexOf(max);
console.log(index);
```

6- - Write a function which can return multiple values from a function

```
function getNames() {

  let firstName = 'Ahmed',
     lastName  = 'Tarek';

  return { firstName, lastName };
}
```

7- Write a function to reverse an array. For Example : reverse([1, 2, 3, 4]) ➜ [4, 3, 2, 1]

```
function reverse(arr) {
        let a = [];
        for (let i = 0; i < arr.length; i++) {
                a[i] = arr[arr.length- (i + 1)];
        }
        return a;
};

console.log(reverse([1, 2, 3, 4]));
console.log(reverse([7, 8, 9, 4, 3]));
console.log(reverse([]));
```

- Write a function that converts an object into an array, where each element represents a key-value pair in the form of an array. For Example : ({ a: 1, b: 2 }) ➞ [["a", 1], ["b", 2]]

```
const toArray = (obj) => {
  let a = [];
  a = Object.entries(obj);
  return a;
};



console.log(toArray({ a: 1, b: 2 }));
console.log(toArray({ car: 15, engine: 12 }));
```