Q1- Find output of the following:

```
const num = 5;
console.log(num + 5);
let a = 6;
a = a + num;
console.log(num - a);
```

Options:

A) 10
    -6

B) Error

C) 10
    -16

D) 10
    -10

Q2- Find output of the following:

```
let a = 2;
{
  let a = 3;
  {
    let a = 4;
    {
      let a = 5;
      console.log(a);
    }
    console.log(a);
  }
  console.log(a);
}
console.log(a);
```

Options:

A) 5
    4
    3
    2

B) Error

C) 2

3

4

5

D) 2

2

2

2

Q3- You are given a week's rainfall data of few cities. Using the data write a function rainDance which returns an array of objects each object containing city name and average rainfall.

Constraints:

Nil

Sample Input:

```
[
  { name: "Roorkee", rainfall: [5, 6, 5, 5, 4, 7, 8] },
  { name: "Pauri", rainfall: [3, 3, 3, 1, 2, 2, 2] },
];
```

```
},
```

Sample Output:

```
[
  { name: "Roorkee", avgRainfall: 5.714285714285714 },
  { name: "Pauri", avgRainfall: 2.2857142857142856 },
];
```

Q4- You are given an object. Write a function to flatten it, where the term flatten is defined as to get all the keys of nested objects and bring them to same level.

Constraints:

Nil

Sample Input:

```
{
  newObj: {
    obj2: {
      obj5: {
        one: 1,
      },
    },
  },
  obj3: {
    obj4: { two: 2 },
  },
};
```

Sample Output:

```
{ 'newObj.obj2.obj5.one': 1, 'obj3.obj4.two': 2 }
```

Q5- Find output of the following:

```
let arr = [1, 2, 3];
(function () {
  for (x in arr) arr.unshift(arr.pop());
  console.log(arr);
})();

let randomAdder = function (arr = ["a", "b"]) {
  arr[arr.length * arr.length] = arr.length * arr.length;
};

randomAdder(arr);
randomAdder();

console.log(arr[9]);
console.log(arr[8]);
```

Options:

A)

[3, 2, 1]

9

["a", "b"]

B)

[3, 2, 1]

9

undefined

C)

[1, 2, 3]

9

["a", "b"]

D)

[1, 2, 3]

9

Undefined

Q6- Find output of the following:

```
(function () {
  if ((-100 && 100 && "0") || [] === true || 0) {
    console.log(1);
    if ([] || (0 && false)) {
      console.log(2);
    }

    if (Infinity && NaN && "false") {
      console.log(3);
      if ("") {
        console.log(4);
      }
    } else {
      console.log(5);
      if (({} || false === "") && !(null && undefined)) {
        console.log(6);
      }
    }
  } else {
    console.log(7);
  }
})();
```

Options:

A) 1 3

B) 7

C) 1 2 5 6

D) 1 3 4

Q7- Find output of the following:

```
let a = "This only works if and only if";

let b = a.slice(a.indexOf("only"));

let c = b.lastIndexOf("only");

b[c] = "i";

console.log(a);

console.log(b);
```

Options:

A)

Error

B)

This only works if and only if

only works if and only if

C)

This only works if and only if

only works if and inly if

D)

This only works if and only if

This only works if and only if

Q8- Write a function 'decToBin' which takes a decimal number and returns its binary.

Constraints:

Nil

Sample Input:

45

Sample Output:

101101

Q9- A spoonerism is an error in speech in which corresponding consonants, vowels, or morphemes are switched between two words in a phrase.

For example,

kite flying becomes fite klying

Your task is to create a function 'spoon' that takes a string of two words, separated by a space and returns a spoonerism of those words in a string, as in the above example.

Note: Input will always contain 2 words

Sample Input:

```
kite flying
```

Sample Output:

```
fite klying
```

Q10- Find output of the following:

```
function f() {
  console.log(arguments);
}

function f(a, b) {
  return a + b;
}

console.log(f(2, 3, 4, 5));

function f(x, y, z, t) {
    return x + y + z + t;
}

console.log(f(2, 3, 4, 5));
```

Options:

A)

Error

B)

14

14

C)

[Arguments] { '0': 2, '1': 3, '2': 4, '3': 5 }

[Arguments] { '0': 2, '1': 3, '2': 4, '3': 5 }

D)

undefined

undefined

Q11- Find output of the following:

```
console.log(a);
```

```
f(2, 3, 4, 5);

var a = 1;
var a = 2;
console.log(a);
console.log(b);
let b = 2;

function f() {
  console.log(arguments);
}
```

Options:

A)

```
undefined
[Arguments] { '0': 2, '1': 3, '2': 4, '3': 5 }
2
Error
```

B)

```
undefined
[Arguments] { '0': 2, '1': 3, '2': 4, '3': 5 }
2
2
```

C)

```
1
Error
```

D)

```
1
[Arguments] { '0': 2, '1': 3, '2': 4, '3': 5 }
2
Error
```

Q12- Find output of the following:

```
let obj = {"concept":""};



console.log(
  JSON.parse(
    JSON.stringify(obj).slice(0, 12) + "JSON" + JSON.stringify(obj).slice(12)
  ).concept
);
```

Options:

A)

Error

B)

undefined

C)

JSON

D)

[Object Object]

Q13- Find output of the following:

```
let a;

console.log(a);

function A() {
  let a = 2;
  }

  console.log(a);

  function C() {
    console.log(a);

    function D() {
      console.log(a);

      a = 2;
    }
    D();
    a = 3;
  }
  C();
}

function B() {
  let a;
  console.log(a);

  function E() {
    a = 6;
    console.log(a);

  }
  a = 2;
  E();
  console.log(a);
}

function F() {
  console.log(a);
  a = 2;
}

a = 3;

F();
B();
A();
```

Options:

A)

Error

B)

undefined

```
3
undefined
6
6
2
2
2
```

C)

```
undefined
3
undefined
6
6
3
3
3
```

D)

```
2
2
2
2
2
```

2

2

2

Q14- You are owner of a mystery e-commerce website. The special thing about this e-commerce store is the user can only buy a single item once! and all users have unique names.

You are given a users database in the form of an objects' Array.

Complete the function definition of 'updateUsers' function to perform the following tasks:

1- Create user if does not exist,add orders if any and return users

2- Create and Initialize order's array if it does not exist and add first order and return users

3- Add order to existing order's array and return users

4- If the item is already ordered return {msg:"Already ordered!"}

Sample Input:

Input is handled for you

Sample Output:

Output is handled for you

Code:

```
let users = [
  {
    name: "Rajneesh",
    age: 34,
    address: {
      local: "22 Alaknanda",
      city: "Dehradun",
      state: "UK",
    },
    orders: [{ id: 1, name: "GOT Book Series" }],
  },
  {
    name: "Bhavesh",
    age: 37,
    address: {
      local: "48 DT Row",
      city: "Hyderabad",
      state: "AP",
    },
  },
  {
    name: "Jasbir",
    age: 38,
    address: {
      local: "196 Lama Bhavan",
      city: "Gangtok",
      state: "Sikkim",
    },
    orders: [
      { id: 1, name: "Chair" },
      { id: 2, name: "PS5" },
    ],
  },
];

function updateUsers(users, userObject, item) {
  //write your code here
}

console.log(
  JSON.stringify(
    updateUsers(
      users,
      {
        name: "Rajneesh",
        age: 34,
        address: {
          local: "22 Alaknanda",
          city: "Dehradun",
          state: "UK",
        },
      },
      "GOT Book Series"
    )
  )
);

console.log(
  JSON.stringify(
    updateUsers(users, {
      name: "Ravi",
      age: 24,
      address: {
        local: "25 Iroda",
        city: "Dehradun",
        state: "UK",
      },
    })
  )
);

console.log(
  JSON.stringify(
    updateUsers(
      users,
      {
        name: "Ravi",
        age: 24,
        address: {
          local: "25 Iroda",
          city: "Dehradun",
          state: "UK",
        },
      },
      "Chair"
    )
  )
);

console.log(
  JSON.stringify(
    updateUsers(
      users,
      {
        name: "Rajneesh",
        age: 34,
        address: {
          local: "22 Alaknanda",
          city: "Dehradun",
          state: "UK",
    },
   },
   "Fan"
  )
 )
);
```