



JOB TASK

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Note: You have to complete both task otherwise your application will be rejected.

Task 01

Make a 1 minute short explanation video on any one of the following topics, upload it to Google Drive, make the link access public and give us the link:

- Stack
- Queue
- How react works
- How JavaScript works
- Virtual Dome and Real Dome

Task 02

Problem statement :

'Yooda Hostel' is a reputed hostel in Dhaka. They are facing some issues in planning and distributing food to their students. You need to build an application to solve their issue. They have prepared requirements for you -

1. Admin can add food with price. Form will have - food name, cost price, after adding show it in a table (backend pagination mandatory), He can edit and delete each item.

FoodItem(id, name, price)

2. Admin can add new student, Form will contain - full name, roll, age, class, hall name, status ("active", "inactive",)

Student(id, fullName, roll, age, class, hall, status)

3. Student table will have a checkbox in every row, and the admin can change status ("inactive", "active") by selecting multiple items from the table. (Bulk action by single button click).
4. There will be a student table (backend pagination mandatory), edit and delete items.
5. While serving food, create a distribution form where admin can search students by roll, select "shift" from drop down, "Date". Add food item they want to take, Then change the status to "served"

Distribution(id, studentId, date, shift, status, foodItemList)

6. If a student has been already serve in that shift on date, show a message - "Already served"

[You have to deploy your site and provide us the live link and github link]

Solve the problem in javascript

'City Bank' is planning gifts for the newly registered credit user on this International 'Mother Language Day' from 21 February to 28 February. They need to distribute the card to their user. You need to help to generate their card number and gift.

You will have to take each person's info to register them. For creating their card number:

1. take first 2 characters from the district name and make it capital letter. Example—from Dhaka , take DH,
2. From current year pick last two number
3. Concat first two numbers of the user postal number.
4. Add user birthdate 4 digit year
5. After that generate serial number with padding 0 in left from each user
6. Total character length will be 16

Create a function named 'cardDistribution()' which will take an array of objects. Each object will have each person's information. (You must use exact function name, or your test case may fail)

While distributing sort data alphabetically with first characters. Sort them with priority numbers. If the user has priority number 1 will be given first.

If the last number of the card is even, give the user Red Rose , if odd give white Rose.

R = red rose

W = white rose

Input

```
cardDistribution([
  { name: "Mr Rashed", birthYear: 1999, currentYear: 2022, district: "Dhaka", postNo: 1200, priority: 2 },
  { name: "Mr Raju", birthYear: 1995, currentYear: 2022, district: "Rajshahi", postNo: 1211, priority: 1 }
])
```

Output

The function should return data.

```
[
  { cardNumber: 'RA22121995000002', gift: 'R', priority: 1 },
  { cardNumber: 'DH22121999000001', gift: 'W', priority: 2 }
]
```

[You have to provide us the github link]