

Deva Assignment Documentation

Number Of Bus for People

Problem

1. Write a function called `do_allocation(number_of_people, number_of_buses)`
2. The function should return a list of number of people who can get into the next bus that comes in based on the following logic:
3. Each bus's capacity is the sum of the capacities of the previous two buses.
4. Once all the people get in, then the buses can continue, but will have 0 people inside it.
5. The output of the function is an array/list with the same length as number of buses.
6. The total of this output array/list should be less than or equal to the number of people.
7. The first bus capacity can be set to 1 by default.

Reference

1. Input Content:
 - a. Number of Peoples
 - b. Number Of Bus
2. The first Bus capacity can be set to 1 by default.
3. Language Use:
 - a. JavaScript (For Logic)
 - b. HTML, CSS (For Skeleton and Style it)

Project Road Map

This assignment follows 'AGILE Model development'. User take two Parameter which is 'Number of Peoples' and another one is 'Number of Bus'. And the function should return the array list of bus. Here The first bus capacity is One by default. And the capacity of every next bus is the sum of capacity of previous two bus.

Logic Used: Fibonacci Series (i.e. The Function Return the sum of people of previous two bus)

Ex: Number of People is 4 & Number of Bus is 3.

i.e. $\text{bus}[0] = 1, \text{bus}[1] = 1, \text{bus}[2] = (\text{bus}[0] + \text{bus}[1]) = 2$

Condition We Apply:

1. If Number of People and Number of buses is One.
2. If Number of People and Number of buses is Two.
3. If the number of people is less then number of buses.
4. If the number of People is greater than number of buses.

Result

Output: Function return array of [number of people in bus 1, number of people in bus 2, number of people in bus 3 and so on.....].

Conclusion

This Assignment is solved using AGILE Model Development Concept. Take the test case and solve it. And continue.