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Analysis report

The one where the money needs to be transported.

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Introduction:

In this program we are about to write a code for the convince of the Bank in transporting the money bags.The main point of this problem is to find the amount of money that can be fixed inside the 100L capacity truck. We will use the POLYA'S problem solving technique to solve this problem. The main points Polya's technique is kept in consideration to start the problem solving. Firstly by understanding the problem, and then secondly we created the flow chart, pseudocode to devise a plan, then we implemented our code according to the plan and lastly we checked and interpreted it.

We as a programmer most importantly needs to understand the problem or the requirement of the user and then we sketch a mind map to create a pathway towards the solution. By using the Polys's Problem solving technique, it is more easy to get the path towards the solution. In four steps of Polya's problem solving technique we can accomplish the desired result.

Step 1 - Understand the problem

Rephrase the problem

Bank needs the program the can calculate the space for the money bags that can be placed inside the truck. The bank demand for a program that can help them beforehand about the spacing inside the truck for the money bank. We as a programmer need to calculate the amount of bags that can be fit in the truck as an output. We can place different size of bags .The program should be written in a sequence that user can add the desired new value every time.

Understanding the words

In this task we are required to specify the truck size to 100L. I firstly placed the “if loop” but it was not enough so I googled again and then put the “while loop”. By using the “while loop” the code will ask for the required value until the user put the value above the 100L. In this way user can only get the solution by adding the required value.

Step 2 - Devising a plan

Approach of choice.

Pseudocode:

Get a input from the user for a truck size

Add while loop to get the correct value from the user greater than 100L

Add an If loop for value greater than 100L

Print a packing plan

Calculate how many big bags can be used(80L)

Calculate the remaining weight after big bags

Calculate how many medium bags can be used (50)

Calculate the remaining weight after medium bags

Calculate how many small bags can be used (20)

Calculate the remaining weight after small bags

Calculate the space left after small bags

Calculate total cost of bags using given rates

Print the total cost and the space left