

Activity 1 : (April 7th 2025)

Introduction to fundamentals of programming

1. Create a pseudocode for making a peanut butter and jelly sandwich. Make your own favorite sandwich or other prepared meal.

Answer:

Input: Peanut butter, jelly, Bread slices, toaster

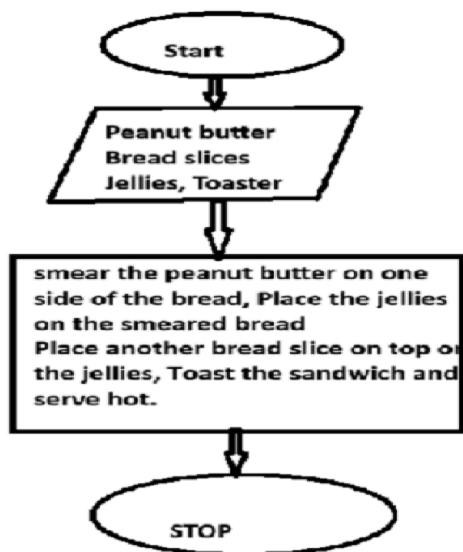
Processing: Take one bread slice and smear the peanut butter on one side of the bread

Place the jellies on the smeared bread

Place another bread slice on top on the jellies and toast the sandwich

Output: Serve the peanut butter and jelly sandwich.

2. Create a flowchart using any tool for making a peanut butter and jelly sandwich. You're your own favorite sandwich or other prepared meal.



3. Create pseudocode and a flowchart for a program that would interact with bank customers and help them determine the value of a bag or jar of coins brought in for deposit.

Answer:

Start of the program

Input: Enter the Acc number, Name of customer, Type of account

Enter the Deposit amt or coins...

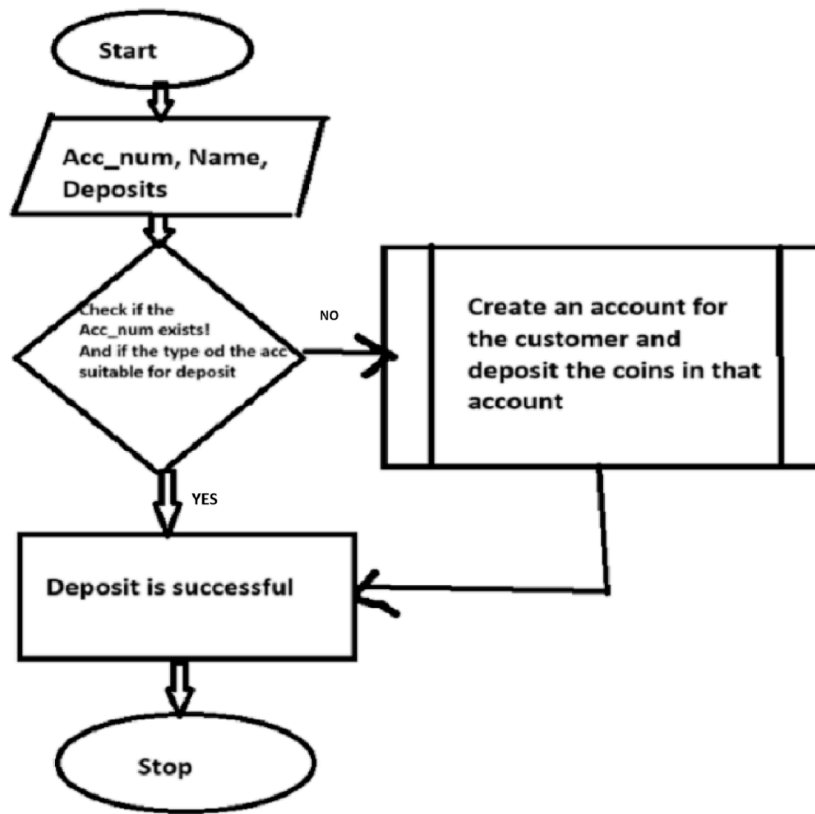
Processing: Validate the Acc_number and Type of the account for deposit

If the Acc_num already exists then validation is successful hence deposit the coins

else create the account for the customer and deposit the coins

Output: Deposit is successful

End of the program



4. Create pseudocode or a flowchart for a program that allows the user to enter gallons of gas and converts it to liters (metric system). NOTE: One US gallon equals 3.7854 liters.

Answer:

Start of the program

Input: Enter the number of gas in gallons (G)

Processing: Calculation to convert the number of gallons of gas to liters (L)

$L = 3.7854 \text{ kept constant}$

$\text{res} = G * L;$

Output: Display the output (res)

End of the program

5. Create pseudocode and a flowchart for a major restaurant sends a chef to purchase fruits and vegetables every day. Upon returning to the store the chef must enter two pieces of data for each item purchased: the quantity (Example: 2 cases) and the price paid (Example: INR 40.67). The program has a list of 20 items and after the chef enters the information, the program provides a total for the purchases for that day. Prepare test data for five (5) items: apples, oranges, bananas, mangoes, and tomatoes.

Answer:

Start the program

Input: Enter the number of items purchased

Enter the Amount paid per each item

Processing: Calculate the sum of all the amount entered

Output: Display the total sum of amount spent per day

End of the program

