WEEK 5

1. Suppose you own a bank. Of course, customers can withdraw money from your ATMs. When a customer goes to the ATM, s/he enters the amount to withdraw. Any customer can withdraw money under following constraints:

1. If the withdrawal amount is less than the balance,
2. If the withdrawal amount is more than the balance, define her/him an overdraft limit, which is 10% of the balance. Then, check if the withdrawal is less than balance plus overdraft limit.

Check if the account balance is sufficient for the withdrawal and print an appropriate message. If the balance is insufficient, consider the overdraft limit, and if the withdrawal amount exceeds the balance + overdraft limit (balance * 1.1), print a message indicating insufficient funds.

Draw a simple flowchart for the withdrawal process, then implement the above problem in C using functions. Be aware that the customer does not have any balance, so every time you run the code assume each customer has a balance of 1000. In class, we will be implementing a random function to assign a random amount of balances for each customer.

2. Ask the user to input the current temperature in degrees Celsius and the humidity level as a percentage.

If the temperature is above 25 degrees Celsius and the humidity is below 70%, it's "Sunny."
If the temperature is below 10 degrees Celsius, it's "Cold."
If the temperature is between 10 and 25 degrees Celsius and the humidity is above 80%, it's "Rainy."
If the temperature is between 10 and 25 degrees Celsius and the humidity is between 70% and 80%, it's "Partly Cloudy."
For any other combinations, it's "Foggy."
Based on these inputs, draw a flowchart, then implement it in C with functions.