

In this assignment, I am going to use chain of responsibility pattern for **ATM Dispense machine**.

The user enters the amount to be dispensed and the machine dispense amount in terms of defined currency bills such as 500 taka, 100 taka, 20 taka, 10 taka.

If the user enters an amount that is not multiples of 10, it will be continuing taking input until the user gives a valid input. I will use Chain of Responsibility pattern to implement this solution. In the solution, the program first checks the entered amount money is multiple of 500 taka or not. If not, it will check if the remaining money after dispensing 500 taka note is multiple of 100 taka and then check multiple of 20 taka and then check multiple of 10 taka. In this way, the program will output how many notes of 500 taka, 100 taka, 20 taka and 10 taka the user will get or try until it is not possible.

The class diagram of the solution:



