**Mini – Project on ATM**

Made by :-

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An automated teller machine (ATM) is an electronic banking outlet that allows customers to complete basic transactions without the aid of a branch representative or teller. There are two primary types of ATMs. Basic units allow customers to withdraw cash and receive reports of their account balances only. The more complex machines accept deposits, facilitate line-of-credit payments and report account information. In this project I have made a basic type of ATM which will withdraw cash and give a receipt when the amount is withdrawn from the account.

INPUT SIGNALS

* ‘card\_insert’ – This is a signal of 1 bit which will tell the machine if the card is inserted in the ATM or not . If the value is ‘1’ then the card has been inserted in the machine and ‘0’ if the card hasn’t been inserted .
* ‘pin’ – This is a signal of 1 bit which is the pin of the debit/credit card . If the value of the pin is ‘1’ then it will proceed to the next step and if the pin is ‘0’ then it will stay in the same state .
* ‘language’ – This is a signal of 1 bit which will determine the language for the transactions . If the language is ‘1’ then it will proceed to the next state and if ‘0’ then it will stay in the same state .
* ‘type’ – This is a signal of 1 bit which will tell the atm what kind of account the user has . If the value of type is ‘1’ then it will proceed further and will stay in the same state if the value is ‘0’ .
* ‘amount’ – This is a signal of 1 bit which will determine the amount of money which is to be withdrawn from the ATM machine . If the value of amount is ‘1’ then it will wait for a few seconds and will give you the desired amount along with the receipt .
* ‘clock’ – This is a signal of 1 bit which is used for the internal clock . It is used to synchronize the operations of the system . In this project , it has a 50% duty cycle with time period of 20 ms .

OUTPUT SIGNALS

* ‘receipt’ – This is an output signal of reg type of 1 bit . This will get high after 10 clock pulses when the right amount is given to the ATM machine .

SIMULATION

