

# BANK ACCOUNT MANAGEMENT

This project basically consists of loan, FD and EMI calculation. There are six types of loans included. They are Home loan, Loan against property, Personal Loan, Business Loan, Education Loan and Vehicle Loan. Also transfer options like Bank to Bank Transfer and Self Transfer are included. At first the system will request the user to give his/ her name and account number. Then it will ask for options. The user has to select any one of the options. Further options are given in the 'Loan' option. The system will print the calculations for loan, FD, and EMI. For Transfers the system will ask for account number. Upon giving the the account number the money will be debited. Also in some of the options age criteria are included.

## WHY WE NEED THIS PROJECT?

The project will help users to calculate loan, FD, EMI calculations along with the system of transfers. This projects basically aims to provide the interface of a simple loan and transfer system. The system also checks age criteria which blocks the user to perform calculations if he/she is under aged. The transfer system provide some information about how money is transferred among different accounts.

# ALGORITHM

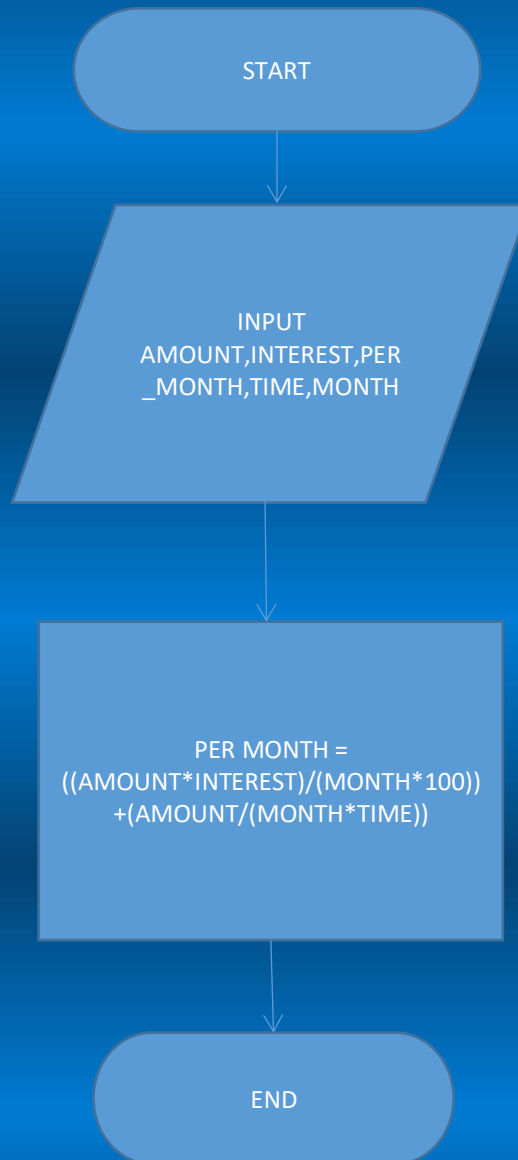
## STEPS:

1. INPUT NAME
2. INPUT ACCOUNT NUMBER
3. CHECK WHETHER ACCOUNT NUMBER IS OF 8 DIGITS
4. OPTIONS- LOAN, FD,EMI,BANK TRANSFER,SELF TRANSFER AND EXIT
5. OPTION- LOAN(HOME LOAN,LOAN AGAINST PROPERTY, PERSONAL LOAN, BUSINESS LOAN AND VEHICLE LOAN)
6. OPTION SELECTION OF LOAN
7. HOME LOAN- AGE CRITERIA - 21 TO 65 LIMIT- 10 LAKHS TO 500000
8. TOTAL = CALCULATION(limit,8,0,10,12)
9. PRINT HOME LOAN TOTAL
10. LOAN AGAINST PROPERTY- AGE CRITERIA- 25 TO 65 LIMIT- 25 CRORE TO 10 LAKHS
11. TOTAL = CALCULATION(limit,9,0,10,12)
12. PRINT LOAN PROPERTY TOTAL
13. PERSONAL LOAN AGE CRITERIA- 21 TO 67 LIMIT- 30 LAKHS TO 50000
14. TOTAL = CALCULATION(limit,12,0,5,12)
15. PRINT PERSONAL LOAN TOTAL
16. EDUCATION LOAN-AGE CRITERIA- 21 TO 70 LIMIT-1 CRORE TO 50000
17. TOTAL = CALCULATION((limit,9,0,8,12)
18. PRINT EDUCATION LOAN TOTAL
19. BUSINESS LOAN- AGE CRITERIA- 21 TO 65 LIMIT 100 CRORE TO 1 CRORE
20. TOTAL = CALCULATION(limit,12,0,12,12)
21. PRINT BUSINESS LOAN TOTAL
22. VEHICLE LOAN- AGE- 21 TO 60 LIMIT- 75 LAKHS TO 50000
23. TOTAL = CALCULATION(limit,7,0,7,12)
24. PRINT VEHICLE LOAN TOTAL
25. IF NO OPTION SELECTED OR WRONG OPTION SELECTED GO TO STEP 5.
26. OPTION FD
27. INPUT AGE FOR FD
28. IF AGE BETWEEN 21 TO 60 INTEREST = 5 P.A
29. IF AGE BETWEEN 60 TO 100 INTEREST = 8 P.A
30. FD = LIMIT \* 0.05 OR LIMIT \*0.08
31. PRINT FD
32. OPTION EMI - AGE CRITERIA - 21 TO 30
33. EMI = CALCULATION(limit,3,0,1,9)
34. PRINT EMI
35. OPTION BANK TRANSFER
36. INPUT ACCOUNT NUMBER
37. CHECK WHETHER THE ACCOUNT NUMBER LENGTH IS 8 IF NOT GOTO STEP 35
38. INPUT AMOUNT LIMIT -1000000 TO 100
39. PRINT MONEY DEBITED
40. OPTION SELF TRANSFER
41. INPUT ANOTHER ACCOUNT NUMBER
42. CHECK WHETHER THE ACCOUNT NUMBER MATCHES WITH YOUR CURRENT ACCOUNT NUMBER
43. CHECK WHETHER THE ACCOUNT NUMBER IS OF 8 DIGITS
44. INPUT LIMIT(1000000 TO 100)
45. PRINT MONEY DEBITED
46. OPTION EXIT
47. END THE PROGRAM
48. NO OPTION SELECTED GOTO STEP 4

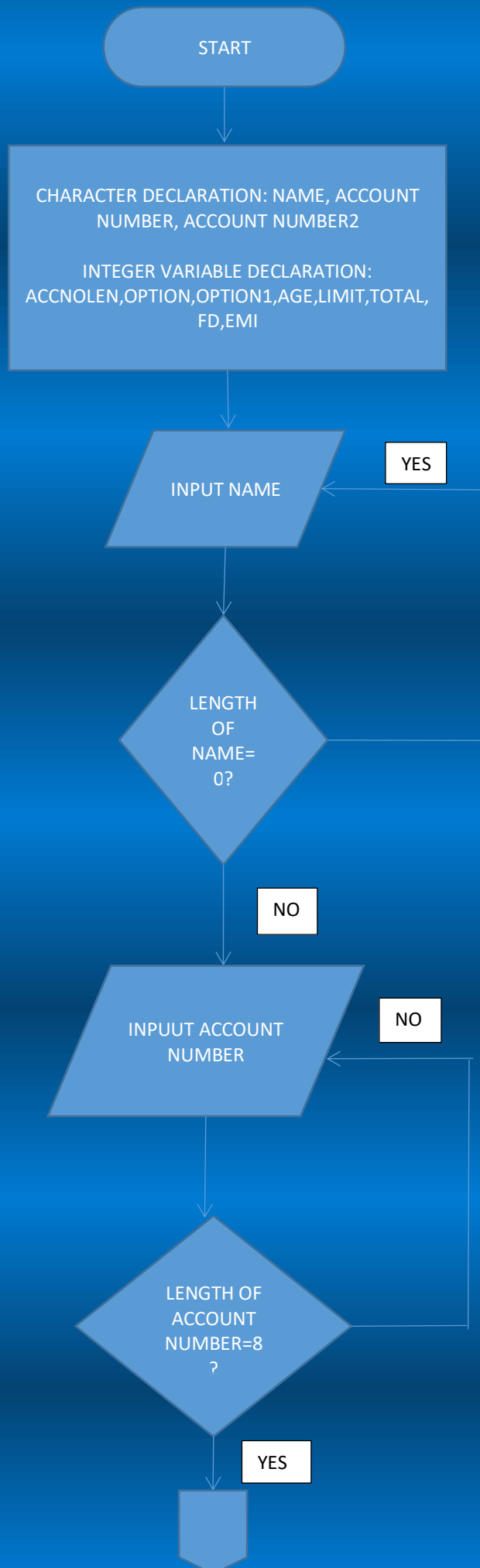
USER DEFINED FUNCTION CALCULATION()



## FLOWCHART OF USER DEFINED FUNCTION CALCULATION



## FLOWCHART OF MAIN() FUNCTION



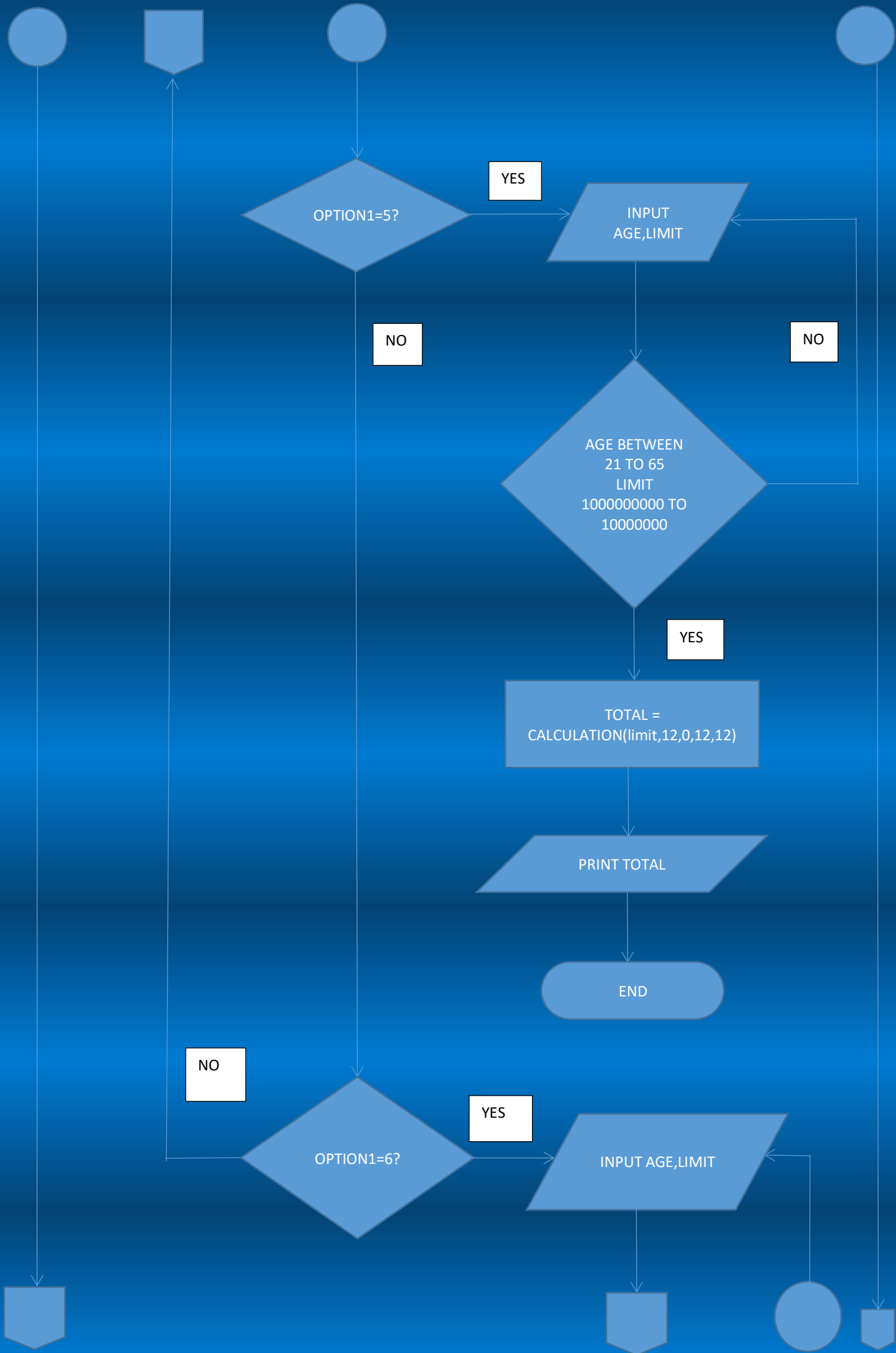


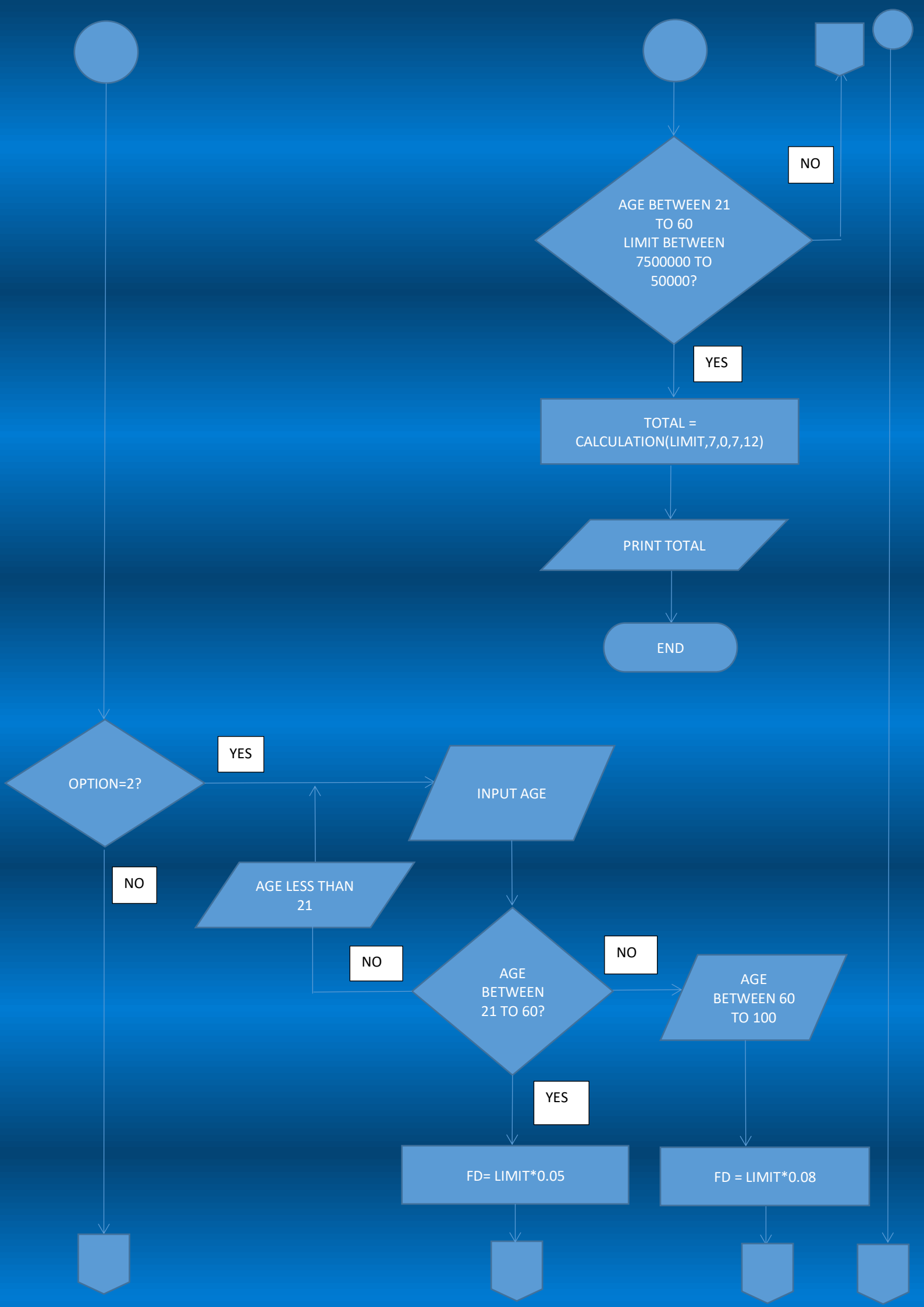




















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printf("3.EMI\n");
printf("4.Bank to Bank transfer\n");
printf("5.Self transfer\n");
printf("6.Exit\n\n");
printf("Please enter the option selected: ");
scanf("%d",&opt);
break;
}
}

//Menu options

for (;;) {
    if (opt==1) {
        // loan option selection
        printf("1.Home Loan\n");
        printf("2.Loan against property\n");
        printf("3.Personal Loan\n");
        printf("4.Education Loan\n");
        printf("5.Business Loan\n");
        printf("6.Vehicle Loan\n\n");
        for (;;) {
            printf("Please select a option from the above options: ");
            scanf("%d",&opt1);
            // loan option selection
            //Home loan
            if (opt1==1) {
                printf("\n\nThanks for choosing Home Loan.\n\n");
                printf("The age criteria for Home Loan is 21 to 65 years.\n\n");
                printf("You can avail the loan for 8 percent interest p.a.\n\n");
                printf("A maximum of 90 percent of the price of the house can be\n\n");
                printf("availed.But the loan pool is upto 10 Crore.\n\n");
                printf("The loan amount with applied interest to be paid in 10 years.");
                printf("To proceed further please give the following details.\n");
                label1:
                for (;;) {
                    printf("Please enter your age: ");
                    scanf("%d", &age);

                    if (age<21 || age>65) {
                        printf("Please start again.\n");
                        goto label1;
                    }

                    printf("Please enter the amount of loan: ");
                    scanf("%d", &limit);

                    if (limit>100000000 || limit<500000) {
                        printf("Please start again.\n");
                        goto label1;
                    }
                }
                else {
                    //Loan calculation per month
                    total=calculation(limit,8,0,10,12);
                }
            }
        }
    }
}

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        printf("You will give %d per month",total);
        break;
    }
    break;}
}
//Loan against property
if(opt1==2){
printf("\n\nThanks for choosing Loan against property.\n\n");
printf(" The age criteria for Loan against property is 25 to 65
years.\n\n");

printf("You can avail the loan for 9 percent interest p.a.\n\n");
printf("The loan pool is upto 25 Crore and a minimum of 10 Lakhs can
be availed.\n\n");

printf("The loan amount with applied interest to be paid in 10 years.");
printf("To proceed further please give the following details.\n");
label2:
for(;;){

    printf("Please enter your age: ");
    scanf("%d", &age);

    if(age<25 || age>65){
        printf("Please start again.\n");
        goto label2;
    }

    printf("Please enter the amount of loan: ");
    scanf("%d", &limit);

    if(limit>250000000 || limit<1000000){
        printf("Please start again.\n");
        goto label1;
    }
    else{
        //Loan calculation per month
        total=calculation(limit,9,0,10,12);
        printf("You will give %d per month",total);
        break;
    }
    break;}
}
// Personal Loan
if(opt1==3){
printf("\n\nThanks for choosing Personal Loan.\n\n");
printf(" The age criteria for Home Loan is 21 to 67 years.\n\n");
printf("You can avail the loan for 12 percent interest p.a.\n\n");
printf("The loan pool is upto 30 Lakhs and minimum of 50000.\n\n");
printf("The loan amount with applied interest to be paid in 5 years.");
printf("To proceed further please give the following details.\n");
label3:
for(;;){

    printf("Please enter your age: ");
    scanf("%d", &age);

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        if(age<21 || age>67){
            printf("Please start again.\n");
            goto label3;
        }

        printf("Please enter the amount of loan: ");
        scanf("%d", &limit);

        if(limit>3000000 || limit<50000){
            printf("Please start again.\n");
            goto label3;
        }
        else{
            //Loan calculation per month
            total=calculation(limit,12,0,5,12);
            printf("You will give %d per month",total);
            break;
        }
        break;}
    }
    //Education Loan
    if(opt1==4){
        printf("\n\nThanks for choosing Education Loan.\n\n");
        printf(" The age criteria for Home Loan is 21 to 70 years.\n\n");
        printf("You can avail the loan for 9 percent interest p.a.\n\n");
        printf("The loan pool is upto 1 Cr and minimum of 50000 can be
        availed.\n\n");

        printf("The loan amount with applied interest to be paid in 8 years.");
        printf("To proceed further please give the following details.\n");
        label4:
        for(;;){

            printf("Please enter your age: ");
            scanf("%d", &age);

            if(age<21 || age>70){
                printf("Please start again.\n");
                goto label4;
            }

            printf("Please enter the amount of loan: ");
            scanf("%d", &limit);

            if(limit>100000000 || limit<50000){
                printf("Please start again.\n");
                goto label4;
            }
            else{
                //Loan calculation per month
                total= calculation(limit,9,0,8,12);
                printf("You will give %d per month",total);
                break;
            }
            break;}
    }
}

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//Business Loan
if(opt1==5){
printf("\n\nThanks for choosing Business Loan.\n\n");
printf(" The age criteria for Home Loan is 21 to 65 years.\n\n");
printf("You can avail the loan for 12 percent interest p.a.\n\n");
printf("The loan pool is upto 100 Cr and minimum of 1Cr.\n\n");
printf("The loan amount with applied interest to be paid in 12 years.");
printf("To proceed further please give the following details.\n");
label5:
for(;;){

    printf("Please enter your age: ");
    scanf("%d", &age);

    if(age<21 || age>65){
        printf("Please start again.\n");
        goto label5;
    }

    printf("Please enter the amount of loan: ");
    scanf("%d", &limit);

    if(limit>1000000000 || limit<10000000){
        printf("Please start again.\n");
        goto label5;
    }
    else{
        //Loan calculation per month
        total=calculation(limit,12,0,12,12);
        printf("You will give %d per month",total);
        break;
    }
    break;}
}
//Vehicle Loan
if(opt1==6){
printf("\n\nThanks for choosing Vehicle Loan.\n\n");
printf(" The age criteria for Home Loan is 21 to 60 years.\n\n");
printf("You can avail the loan for 7 percent interest p.a.\n\n");
printf("A maximum of 70 percent of the price of the house can be
availed.But the loan pool is upto 75 Lakhs and minimum of 50000 can be availed.\n\n");
printf("The loan amount with applied interest to be paid in 7 years.");
printf("To proceed further please give the following details.\n");
label6:
for(;;){

    printf("Please enter your age: ");
    scanf("%d", &age);

    if(age<21 || age>60){
        printf("Please start again.\n");
        goto label6;
    }

    printf("Please enter the amount of loan: ");

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scanf("%d", &limit);

if(limit>7500000 || limit<50000){
    printf("Please start again.\n");
    goto label6;
}
else{
    //Loan calculation per month
    total=calculation(limit,7,0,7,12);
    printf("You will give %d per month",total);
    break;
}
break;}
}
break;
}
break;
}

else if(opt==2){
    printf("Thanks for choosing. For Fixed Deposit please read the below details.");
    printf("\nAge criteria is between 21 to 60.");
    printf("\nInterest given on amount is 5 percent.");
    printf("\nFor senior citizen the interest rate is 8 percent.");
    for(;;){
        label7:
        printf("\n\nPlease enter your age: ");
        scanf("%d",&age);
        if(age<21){
            printf("\nPlease start again.");
            goto label7;
        }
        if(age>=21 || age<=60){
            printf("\nMaturity period is 10 years.");
            printf("\nPlease enter the amount: ");
            scanf("%d",&limit);
            fd= limit*0.005;
            printf("You will be getting %d per year.",fd);
            break;
        }
        if(age>60 || age<100){
            printf("\nMaturity period is 10 years.");
            printf("\nYou are eligible for senior citizen FD scheme.");
            printf("\nPlease enter the amount: ");
            scanf("%d",&limit);
            fd= limit * 0.008;
            printf("You will be getting %d per year.",fd);
            break;
        }
        else{
            printf("Age, amount or wrong input.");
            goto label7;
        }
    }
    break;
}
break;
}

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    }

//EMI
else if(opt==3){
    printf("Thanks for choosing. Please refer to the below details and proceed for EMI.");
    printf("\nAge criteria is between 21 to 60.");
    printf("\nYou can avail the EMI at 3 percent p.m.");
    printf("EMI will be for 9 months.");
    label8:
    for(;;){
        printf("\nPlease enter your age: ");
        scanf("%d",&age);
        if(age<21 || age> 60){
            printf("\nPlease enter again.");
            goto label8;
        }
        else if(age>=21 || age<= 60){
            printf("Please enter the amount: ");
            scanf("%d",&limit);
            emi = calculation(limit,3,0,1,9);
            printf("The EMI for every month is %d.",emi);
            break;
        }
        else{
            printf("Please try again.");
            continue;
        }
    }

    break;
}

//Bank to Bank transfer
else if(opt==4){
    printf("Please enter the Bank account number of the receiver.\n");
    printf("The account number should be of 8 digits only.\n");
    for(;;){
        printf("Enter the account number: ");
        scanf("%s",accountbt);
        if(strlen(accountbt)!=8){
            printf("Please try again.");
            continue;
        }
        else{
            printf("You can transfer a maximum of 1000000 and minimum of
100.");

            printf("Enter the amount: ");
            scanf("%d",&limit);
            if(limit<100 || limit>1000000){
                printf("Please try again.\n");
                continue;
            }
            else{
                printf("Your money is successfully debited.");
                break;
            }
        }
    }
}

```

```

        }
        break;
    }
    break;
}

//Self transfer
else if(opt==5){
    printf("Please confirm your Bank Account number.\n");
    for(;;){
        printf("Enter your bank account number: ");
        scanf("%s",accountbt);
        if(accountbt!=accountdt && strlen(accountbt)!=8){
            printf("Please enter again.");
            continue;
        }
        else{
            printf("A maximum of 1000000 can be transferred and a minimum of
100.\n");

            for(;;){
                printf("Please enter the amount: ");
                scanf("%d",&limit);
                if(limit<100 || limit>1000000){
                    printf("Please enter again the amount.\n");
                    continue;
                }
                else{
                    for(;;){
                        printf("Enter the account number of your another account: ");
                        scanf("%s",accountbt);
                        if(strlen(accountbt)!=8){
                            printf("Please enter the account number again.\n");
                            continue;
                        }
                        else{
                            printf("Your money has been successfully debited.");
                            break;
                        }
                    }
                }
            }
            break;
        }
    }
    break;
}

break;
}

else if(opt==6){
    printf("Thanks for using the Bank Account Management System.");
    break;
}
else{

```

```
        printf("No option selected");
        continue;
    }
}

return 0;
}
```

## OUTPUTS

```
C:\Users\Bhaskar Bhar\OneDr x + v
```

```
***::::::::::::::::::BANK ACCOUNT MANAGEMENT SYSTEM::::::::::::::::::***  
  
Name of the account holder(Please use underscores for spaces): Bhaskar_Bhar  
Please enter the account no.: 12547836  
  
*****Welcome Bhaskar_Bhar to the Bank Management system.*****  
  
Please browse through the menu given below and type the option number selected.  
1.Loan  
2.FD  
3.EMI  
4.Bank to Bank transfer  
5.Self transfer  
6.Exit
```

## USER DETAILS AND MENU INTERFACE

```
Please enter the option selected: 1
1.Home Loan
2.Loan against property
3.Personal Loan
4.Education Loan
5.Business Loan
6.Vehicle Loan
```

## LOAN MENU INTERFACE

```
Please select a option from the above options: 1

Thanks for choosing Home Loan.

The age criteria for Home Loan is 21 to 65 years.

You can avail the loan for 8 percent interest p.a.

A maximum of 90 percent of the price of the house can be availed.But the loan pool is upto 10 Crore.

The loan amount with applied interest to be paid in 10 years.To proceed further please give the following details.
Please enter your age: 21
Please enter the amount of loan: 5000000
You will give 74999 per month
```

## HOME LOAN

Please select a option from the above options: 2

Thanks for choosing Loan against property.

The age criteria for Loan against property is 25 to 65 years.

You can avail the loan for 9 percent interest p.a.

The loan pool is upto 25 Crore and a minimum of 10 Lakhs can be availed.

The loan amount with applied interest to be paid in 10 years.To proceed further please give the following details.

Please enter your age: 26

Please enter the amount of loan: 2500000

You will give 39583 per month

## LOAN AGAINST PROPERTY

Please select a option from the above options: 3

Thanks for choosing Personal Loan.

The age criteria for Home Loan is 21 to 67 years.

You can avail the loan for 12 percent interest p.a.

The loan pool is upto 30 Lakhs and minimum of 50000.

The loan amount with applied interest to be paid in 5 years.To proceed further please give the following details.

Please enter your age: 23

Please enter the amount of loan: 1000000

You will give 26666 per month

## PERSONAL LOAN

Please select a option from the above options: 4

Thanks for choosing Education Loan.

The age criteria for Home Loan is 21 to 70 years.

You can avail the loan for 9 percent interest p.a.

The loan pool is upto 1 Cr and minimum of 50000 can be availed.

The loan amount with applied interest to be paid in 8 years.To proceed further please give the following details.

Please enter your age: 25

Please enter the amount of loan: 1000000

You will give 17916 per month

## EDUCATION LOAN

Please select a option from the above options: 5

Thanks for choosing Business Loan.

The age criteria for Home Loan is 21 to 65 years.

You can avail the loan for 12 percent interest p.a.

The loan pool is upto 100 Cr and minimum of 1Cr.

The loan amount with applied interest to be paid in 12 years.To proceed further please give the following details.

Please enter your age: 25

Please enter the amount of loan: 100000000

You will give 1694444 per month

## BUSINESS LOAN



Please select a option from the above options: 6

Thanks for choosing Vehicle Loan.

The age criteria for Home Loan is 21 to 60 years.

You can avail the loan for 7 percent interest p.a.

A maximum of 70 percent of the price of the house can be availed. But the loan pool is upto 75 Lakhs and minimum of 50000 can be availed.

The loan amount with applied interest to be paid in 7 years. To proceed further please give the following details.

Please enter your age: 25

Please enter the amount of loan: 5000000

You will give 88689 per month

## VEHICLE LOAN

Please enter the option selected: 2

Thanks for choosing. For Fixed Deposit please read the below details.

Age criteria is between 21 to 60.

Interest given on amount is 5 percent.

For senior citizen the interest rate is 8 percent.

Please enter your age: 23

Maturity period is 10 years.

Please enter the amount: 100000

You will be getting 500 per year.

## FD(AGE 21 TO 60)

Please enter the option selected: 2

Thanks for choosing. For Fixed Deposit please read the below details.

Age criteria is between 21 to 60.

Interest given on amount is 5 percent.

For senior citizen the interest rate is 8 percent.

Please enter your age: 65

Maturity period is 10 years.

Please enter the amount: 600000

You will be getting 3000 per year.

## FD(SENIOR CITIZEN)

Please enter the option selected: 3

Thanks for choosing. Please refer to the below details and proceed for EMI.

Age criteria is between 21 to 60.

You can avail the EMI at 3 percent p.m .EMI will be for 9 months.

Please enter your age: 26

Please enter the amount: 50000

The EMI for every month is 5721.

## EMI

Please enter the option selected: 4

Please enter the Bank account number of the receiver.

The account number should be of 8 digits only.

Enter the account number: 12345678

You can transfer a maximum of 1000000 and minimum of 100. Enter the amount: 500

Your money is successfully debited.

-----

## BANK TO BANK TRANSFER

```
C:\Users\Bhaskar Bhar\OneDr x + v

***:::BANK ACCOUNT MANAGEMENT SYSTEM:::***

Name of the account holder(Please use underscores for spaces): Bhaskar_Bhar
Please enter the account no.: 12547836

*****Welcome Bhaskar_Bhar to the Bank Management system.*****

Please browse through the menu given below and type the option number selected.
1.Loan
2.FD
3.EMI
4.Bank to Bank transfer
5.Self transfer
6.Exit

Please enter the option selected: 5
Please confirm your Bank Account number.
Enter your bank account number: 12547836
A maximum of 1000000 can be transferred and a minimum of 100.
Please enter the amount: 500
Enter the account number of your another account: 12345678
Your money has been succesfully debited.
```

## SELF TRANSFER

```
Please browse through the menu given below and type the option number selected.
1.Loan
2.FD
3.EMI
4.Bank to Bank transfer
5.Self transfer
6.Exit

Please enter the option selected: 6
Thanks for using the Bank Account Management System.
```

## EXIT