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PSEUDOCODE

//PROGRAM MICH BANK

Struct transaction(

        String name

        Integer day

        Integer month

        Integer year

) as array trans

//Function untuk menghitung bunga

Function interestTable(int save,int y)

  If(save <1000000) then

      If(y>=12 AND y<36) then

        return 0.01

      Else if(y>=36 AND y<60) then

        return 0.012

      Else if(y>=60&&y<120) then

        return 0.015

      Enf if

  Else if (save>=1000000) then

      If(y>=12&&y<36) then

        return 0.012

      Else if(y>=36&&y<60) then

        return 0.015

      Else if(y>=60&&y<120) then

        return 0.017

      End if

  End if

End function

```
Module main()

        Time_t now

        Struct tm *date

        Time(&now)

        Set date = localtime(&now)

        Declare Integer choose

        Declare character again

        While again not n{

        Display "$$------------------------------------------------------------------------------------------
        $$"

        Display "$$------------------------------------------------------------------------------------------
        $$"

        Display "$$                                                                    $$"

        Display "$$ ***      *** ***** ***** ** **    ********     ***      ***    ** **
        **    $$"

        Display "$$ ****    **** *** * ***** ** **   **    **    *****     ****  ** **
        **    $$"

        Display "$$ ** *** **    *  * *     *******    *********   ** **      ** ** ** **
        **      $$"

        Display "$$ **      ** * * *     *******   *********  ********* ** ** ** **
        **      $$"

        Display "$$ **      ** *** * ***** ** **   **    ** **      ** ** **** ** **
        $$"

        Display "$$ **      ** ***** ***** ** **   ******** **      ** ** *** **
        **   $$"

        Display "$$                                                                 $$")

        Display "$$------------------------------------------------------------------------------------------
        $$"

        Display "$$------------------------------------------------------------------------------------------
        $$"

        Display "              WELCOME TO MICH BANK!")

        Labelinvalid:

        Display "SELECT THE FEATURE YOU WANT ACCORDING TO THE
        NUMBER:1. Deposits (Interest calculations per year (Annual) of 5%%) 2. Planned
        Savings 3. Planned Savings Transactions Check 4. Exit"

        Display "Choice: "
```
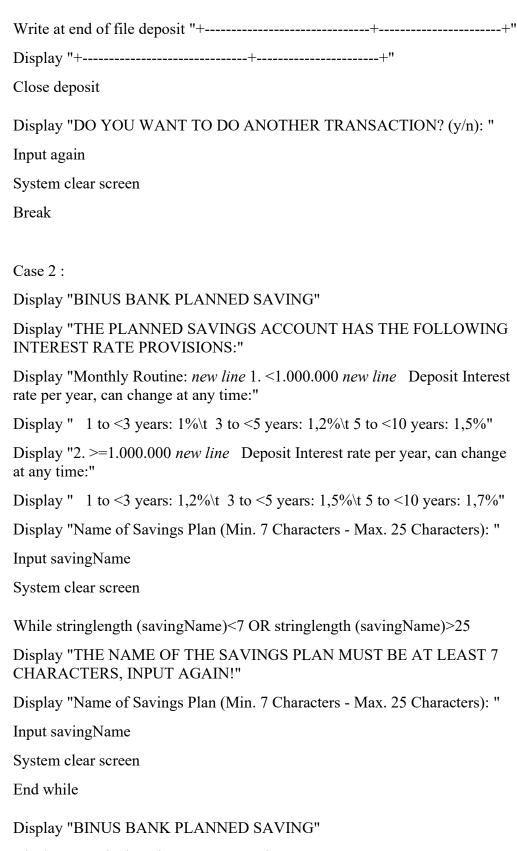
Input choose

System clear screen

Declare Real interestMonth

Declare long long integer i,saving,month,autodebetDay,sum,summ,check

Set sum=0,summ=0,check=0

Declare string name,savingName,savingnamee

Select choose

        Case 1 :

        Display "BINUS BANK DEPOSITS"

        Display "Name: "

        Input name

        Display "Saving: Rp. "

        Input saving

        Display "Term of deposit (month): "

        Input month

        System clear screen

        While saving<1000000

        Display "BINUS BANK DEPOSITS"

        Display "MINIMUM DEPOSIT RP. 1.000.000, INPUT AGAIN!"

        Display "Name: "

        Input name

        Display "Saving: Rp. "

        Input saving

        Display "Term of deposit (month): "

        Input month

        System clear screen

        End while

        Display "TRANSACTION SUCCESSFUL!"

        Display "DEPOSITO REPORT"

        Declare OutputFile deposit

Open deposit "Deposit Report.txt" //Append

Write at end of file deposit "Date of Creation: ", date->tm_mday, date->tm_mon+1, date->tm_year + 1900,name

Write at end of file deposit "+-----------------------------+----------------------+"

Write at end of file deposit "| MONTH | AMOUNT |"

Write at end of file deposit "+-----------------------------+----------------------+"

Write at end of file deposit "+-----------------------------+----------------------+"

Write at end of file deposit "| MONTH | AMOUNT |"

Write at end of file deposit "+-----------------------------+----------------------+"

For i:=1 to month{

    Set interestMonth= saving*(0.05/12)*0.8;

    Set saving+=interestMonth;

    If i mod10==1 AND i not 11 then

    Write at end of file deposit "|" i "st month deposit | Rp. " saving ",- |"

    Display "|" i "st month deposit | Rp. " saving ",- |"

    Else if i mod 10==2 AND i not 12 then

    Write at end of file deposit "|" i "nd month deposit | Rp. " saving ",- |"

    Display "|" i "nd month deposit | Rp. " saving ",- |"

    Else if i mod 10==3 AND i not 13 then

    Write at end of file deposit "|" i "rd month deposit | Rp. " saving ",- |"

    Display "|" i "rd month deposit | Rp. " saving ",- |"

    Else if i mod 12==0 then

    Write at end of file deposit "|" i "th month (" i/12 "year) deposit\t| Rp. " saving ",- |"

    Display "|" i "th month (" i/12 "year) deposit\t| Rp. " saving ",- |"

    Else

    Write at end of file deposit "|" i "th month deposit | Rp. " saving ",- |"

    Display "|" i "th month deposit | Rp. " saving ",- |"

    End if

End for

Write at end of file deposit "+-------------------------------+---------------------+"

Display "+------------------------------+---------------------+"

Close deposit

Display "DO YOU WANT TO DO ANOTHER TRANSACTION? (y/n): "

Input again

System clear screen

Break

Case 2 :

Display "BINUS BANK PLANNED SAVING"

Display "THE PLANNED SAVINGS ACCOUNT HAS THE FOLLOWING INTEREST RATE PROVISIONS:"

Display "Monthly Routine: *new line* 1. <1.000.000 *new line* Deposit Interest rate per year, can change at any time:"

Display "   1 to <3 years: 1%\t 3 to <5 years: 1,2%\t 5 to <10 years: 1,5%"

Display "2. >=1.000.000 *new line*   Deposit Interest rate per year, can change at any time:"

Display "   1 to <3 years: 1,2%\t 3 to <5 years: 1,5%\t 5 to <10 years: 1,7%"

Display "Name of Savings Plan (Min. 7 Characters - Max. 25 Characters): "

Input savingName

System clear screen

While stringlength (savingName)<7 OR stringlength (savingName)>25

Display "THE NAME OF THE SAVINGS PLAN MUST BE AT LEAST 7 CHARACTERS, INPUT AGAIN!"

Display "Name of Savings Plan (Min. 7 Characters - Max. 25 Characters): "

Input savingName

System clear screen

End while

Display "BINUS BANK PLANNED SAVING"

Display "Nominal Savings Every Month: Rp. "

Input saving

System clear screen

Display "BINUS BANK PLANNED SAVING"

Display "Saving Period (Minimum 12 months): "

Input month

System clear screen

While month<12 OR month >=120

Display "THE SAVING PERIOD MUST BE AT LEAST 12 MONTHS, INPUT AGAIN!"

Display "Saving Period (Minimum 12 months): "

Input month

System clear screen

End while

Display "BINUS BANK PLANNED SAVING"

Display "Set Autodebit Date (1-28): "

Input autodebetDay

System clear screen

While autodebetDay<1 OR autodebetDay>28

Display "ERROR, ENTER THE CORRECT DATE!"

Display "Set Autodebit Date (1-28): "

Input autodebetDay

System clear screen

End while

Declare OutputFile plannedsavings

Open plannedsavings "Planned Saving Report.txt" //Append

Write at end of file plannedsavings "Date of Creation: ",date->tm_mday, date->tm_mon+1, date->tm_year + 1900,savingName

Write at end of file plannedsavings "+-------------------------------------+-----------------------+"

Write at end of file plannedsavings "| MONTH | AMOUNT |"

Write at end of file plannedsavings "+-------------------------------------+-----------------------+"

Display "TRANSACTION SUCCESSFUL!"

Display "PLANNED SAVING REPORT"

For i:=1 to month

  Set sum=saving

  Set sum=saving+saving*interestTable(sum,month)

  Set summ+=sum

  If i mod 10==1 AND i not 11 then

  Write at end of file plannedsavings "|" i "st month savings amount | Rp. " sum ",- |"

    If i==1 then{

    Display "Amount of savings earned per month: Rp. " sum ",-"

    End if

  }

  Else if i mod 10==2 AND i not 12 then

  Write at end of file plannedsavings "|" i "nd month savings amount |

  Rp. " sum ",- |"

  Else if i mod 10==3 AND I not 13 then

  Write at end of file plannedsavings "|" i "rd month savings amount |

  Rp. " sum ",- |"

  Else if i mod 12==0 then

  Write at end of file plannedsavings "|" i "th month (" i/12 "year)

  savings amount\t| Rp. " sum ",- |"

  Else

  Write at end of file plannedsavings "|" i "th month savings amount |

  Rp. " sum ",- |"

End for

Write at end of file plannedsavings "+---------------------------------------+----------------------+"

Display "The amount of savings obtained according to the period of saving: Rp. " sum ",-"

Close plannedsavings

Declare OutputFile transaction

Open transaction "Transaction Report.txt" //Append

If date->tm_mday == autodebetDay then

Write at end of file transaction savingName, date->tm_mday, date->tm_mon + 1, date->tm_year + 1900

End if

Close transaction

Display "DO YOU WANT TO DO ANOTHER TRANSACTION? (y/n): "

Input again

System clear screen

Break

Case 3:

Display "PLANNED SAVINGS TRANSACTIONS CHECK"

Display "Enter the Saving Name: "

Input savingnamee

System clear screen

Open transaction "Transaction Report.txt" //Read

Set i=0

Display "TRANSACTIONS:"

While not feof(transaction)

Read transaction trans[i].name,&trans[i].day,&trans[i].month,&trans[i].year

If(stringcompare(trans[i].name,savingnamee)==0 then

Set check=1

Display "Saving Name: " trans[i].name ", auto debit has been done on " trans[i].day,trans[i].month,trans[i].year

End if

Set i++

End while

If check==0 then

Display "TRANSACTIONS BASED ON THE NAME OF THE PLANNED SAVINGS ARE NOT AVAILABLE!"

Display "\nDO YOU WANT TO DO ANOTHER TRANSACTION? (y/n): "

Input again

System clear screen

Break

Case 4:

Go to labelend

//End Module

Default:

Display "INVALID CHOICE!"

Go to labelinvalid

End select

End while

Labelend:

Fflush stdin

Display "Exit..."

End module