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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 "$$ \*\*\*\* \*\*\*\* \*\*\* \* \*\*\*\*\* \*\* \*\* \*\* \*\* \*\*\*\*\* \*\*\*\* \*\* \*\* \*\* $$"

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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