TEAM ID	PNT2022TMID26751
TITLE	AI BASED DISCOURSE FOR BANKING INDUSTRY
DATE	14.11.2022

Creating Loan Account Action

```
# Create a window window
= Tk()
window.title("Loan Calculator") # Set title

# create the input boxes.
Label(window, text = "Annual Interest Rate").grid(row = 1, column
                        = 1, sticky = W)
Label(window, text = "Number of
Years").grid(row = 2, column = 1, sticky
                    = W)
Label(window, text = "Loan Amount").grid(row
= 3,
                column = 1, sticky = W)
            Label(window, text = "Monthly
                Payment").grid(row = 4, column
                    = 1, sticky = W)
Label(window, text = "Total Payment").grid(row
= 5,
                    column = 1, sticky = W)

# for taking inputs
self.annualInterestRateVar =
StringVar()
```

```
Entry(window, textvariable =
        self.annualInterestRateVar, justify
        = RIGHT).grid(row = 1, column = 2)

self.numberOfYearsVar = StringVar()
Entry(window, textvariable =
      self.numberOfYearsVar, justify =
      RIGHT).grid(row = 2, column = 2)




self.loanAmountVar = StringVar()
Entry(window, textvariable =
   self.loanAmountVar, justify =
   RIGHT).grid(row = 3, column = 2)

self.monthlyPaymentVar = StringVar()
lblMonthlyPayment = Label(window,
textvariable =
self.monthlyPaymentVar).grid(row
        = 4, column = 2, sticky = E)

self.totalPaymentVar = StringVar() lblTotalPayment
= Label(window,
textvariable = self.totalPaymentVar).grid(row
        =

        column = 2, sticky = E)

# create the button
```

```
   btComputePayment = Button(window, text = "Compute
                      Payment", command = self.computePayment).grid(
                        row = 6, column = 2, sticky =
   E) # Create an event loop window.mainloop()
def    computePayment(self):    #
   compute the total payment.
   monthlyPayment                                                    =
                self.getMonthlyPayment(float(self.loanAmountVar.get()),
                float(self.annualInterestRateVar.get())        /        1200,
                int(self.numberOfYearsVar.get()))

    self.totalPaymentVar.set(format(totalPayment,

'10.2f'))    #    compute    the    monthly    payment.    def
getMonthlyPayment(self,    loanAmount,    monthlyInterestRate,
numberOfYears):
   monthlyPayment     =     loanAmount     *
                monthlyInterestRate / (1- 1 / (1 +
                monthlyInterestRate) **
                (numberOfYears * 12))



from tkinter import
 * return
monthlyPayment;

# Import tkinter

class

   LoanCalculator:

   def____init

   (self): window =
```

```
    Tk() # Create a

    window

        window.title("Loan Calculator") #
Set title # create the input boxes.
        Label(window, text = "Annual Interest Rate").grid(row = 1, column
                                    = 1, sticky = W)
        Label(window, text = "Number of
        Years").grid(row = 2, column = 1, sticky =
                                   W)
        Label(window, text = "Loan
        Amount").grid(row = 3,


                               column = 1, sticky = W)
     Label(window, text = "Monthly Payment").grid(row =
                                         4, column =  1,
                                  sticky = W)
        Label(window, text = "Total
        Payment").grid(row = 5,
                               column = 1, sticky = W)

        # for taking inputs self.annualInterestRateVar
        =
        StringVar()
        Entry(window, textvariable = self.annualInterestRateVar,
                  justify =
                  RIGHT).grid(row = 1, column =) self.numberOfYearsVar
        = StringVar()

        Entry(window, textvariable = self.numberOfYearsVar,
                justify =
```

```
        RIGHT).grid(row = 2, column = 2) self.loanAmountVar
    =       StringVar()       Entry(window,       textvariable       =
    self.loanAmountVar, justify =
        RIGHT).grid(row  =  3,  column  =  2)
    self.monthlyPaymentVar = StringVar()
    lblMonthlyPayment = Label(window,
    textvariable =
                    self.monthlyPaymentVar).grid(row
                    = 4, column = 2, sticky = E)

    self.totalPaymentVar = StringVar() lblTotalPayment
    = Label(window,
    textvariable = self.totalPaymentVar).grid(row
                = 5, column = 2, sticky = E)

    # create the button
    btComputePayment  =  Button(window,  text  =  "Compute
    Payment",  command  =  self.computePayment).grid(  row  =  6,
    column = 2, sticky = E) window.mainloop() # Create an event loop



# compute the total payment.
def computePayment(self):

    monthlyPayment          =          self.getMonthlyPayment(1200,
    int(self.numberOfYearsVar.get()))


        float(self.loanAmountVar.get()),
    float(self.annualInterestRateVar.get()) /
    self.monthlyPaymentVar.set(format(monthlyPayment,
    '10.2f')) totalPayment =
```

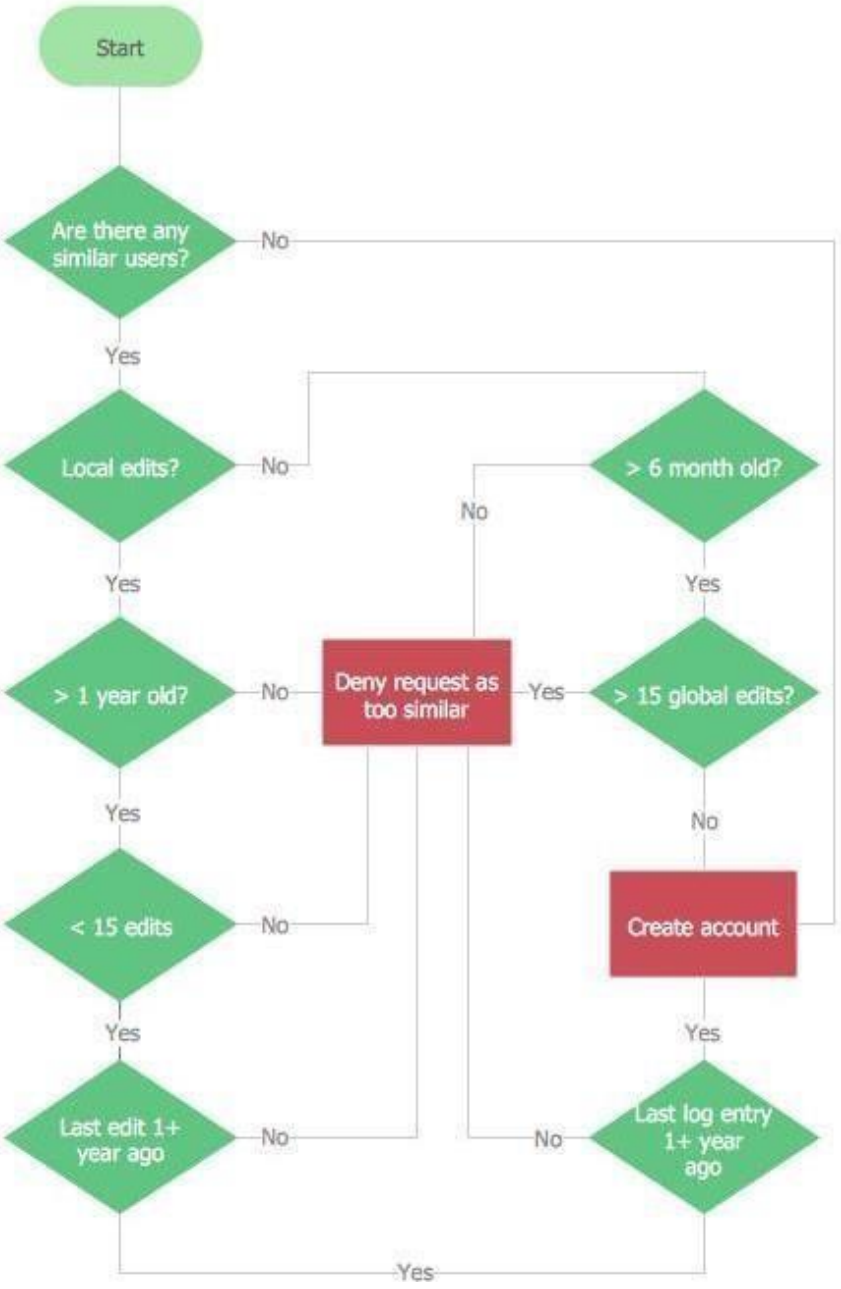
```
        float(self.monthlyPaymentVar.get()) * 12 \
                        * int(self.numberOfYearsVar.get())

        self.totalPaymentVar.set(format(totalPayment, '10.2f'))

    def getMonthlyPayment(self, loanAmount, monthlyInterestRate,
numberOfYears):
        # compute the monthly payment. monthlyPayment =
        loanAmount * monthlyInterestRate / (1
        - 1 / (1 + monthlyInterestRate) **
        (numberOfYears * 12)) return monthlyPayment;
        root = Tk() # create the widget

 # call the class to run the program. LoanCalculator()
```

Flowchart:


Start
Are there any similar users?
No
Yes
Local edits?
No
> 6 month old?
No
Yes
Yes
> 1 year old?
No
Deny request as too similar
Yes
> 15 global edits?
Yes
No
< 15 edits
No
Create account
Yes
Yes
Last edit 1+ year ago
No
No
Last log entry 1+ year ago
Yes