TEAM ID	PNT2022TMID42533
TITLE	AI BASED DISCOURSE FOR BANKING INDUSTRY
DATE	16.11.2022

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()) /
```

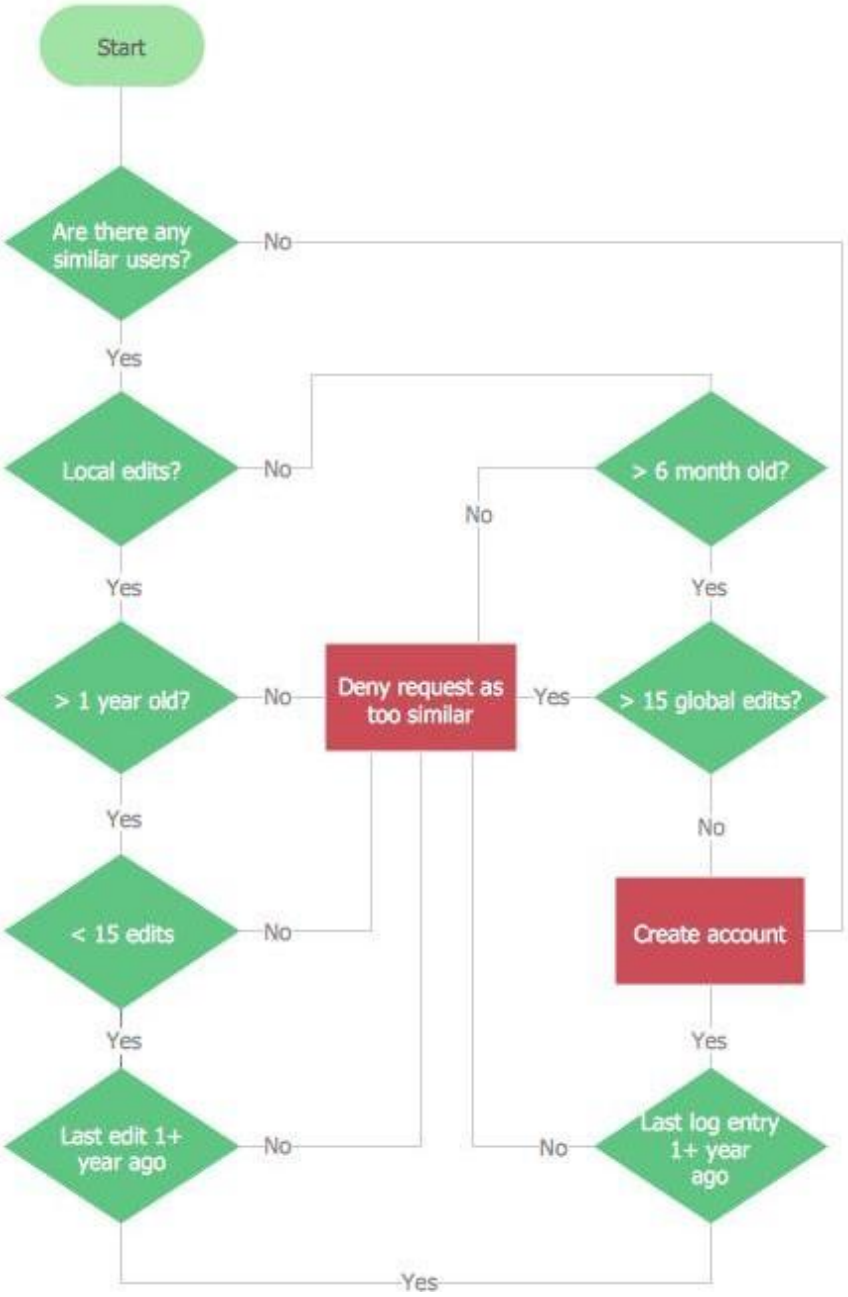
```
        self.monthlyPaymentVar.set(format(monthlyPayment,
        '10.2f'))totalPayment =
        float(self.monthlyPaymentVar.get()) * 12 \
                            * int(self.numberOfYearsVar.get())

        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