| TEAM ID | PNT2022TMID45108 |
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| TITLE | AI BASED DISCOURSE FOR BANKING INDUSTRY |
| DATE | 17.11.2022 |

# 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()))
```

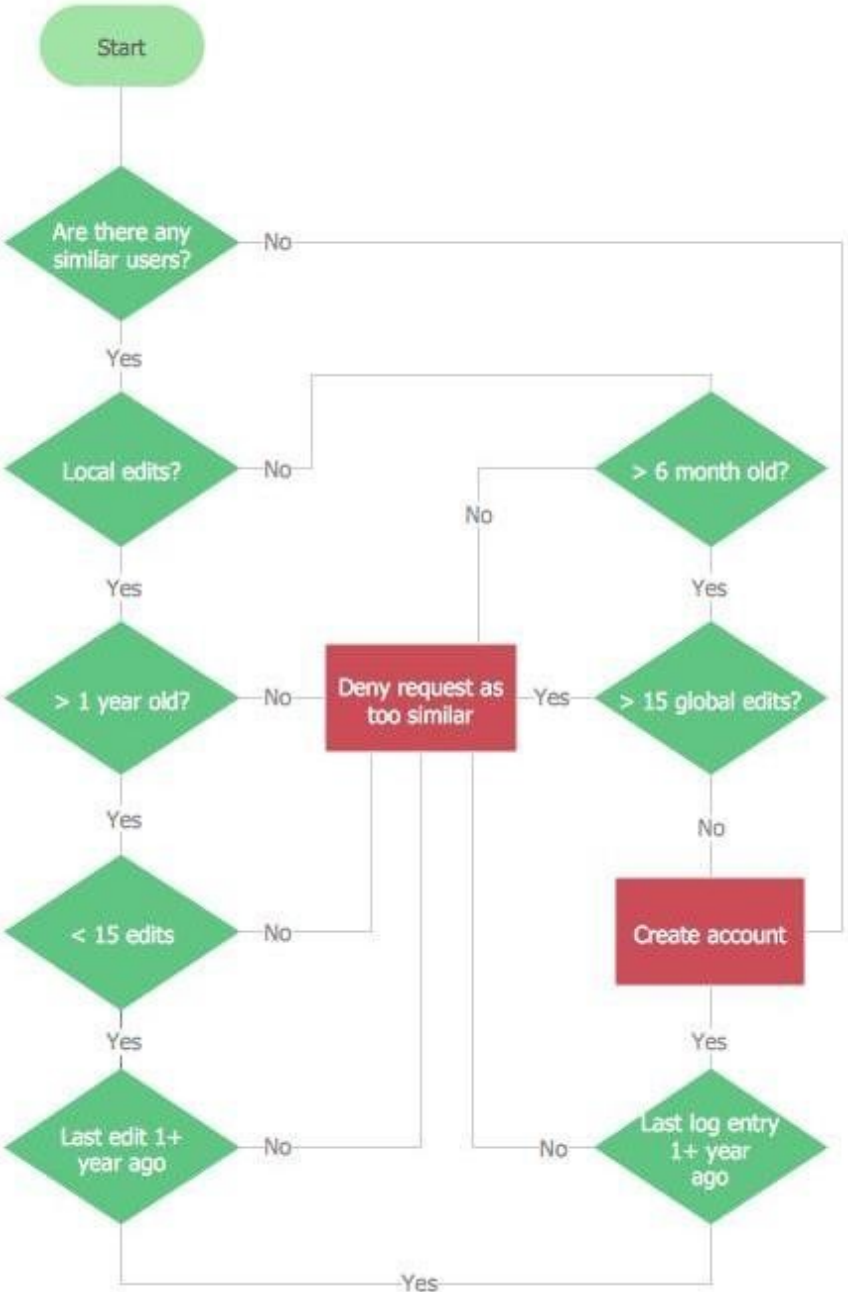
```
        float(self.loanAmountVar.get()),
    float(self.annualInterestRateVar.get()) /
    self.monthlyPaymentVar.set(format(monthlyPayment,
    '10.2f')) totalPayment =
    float(self.monthlyPaymentVar.get()) * 12 \
                    * int(self.numberOfYearsVar.get())

    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