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print('\n        Name - Deep Das')
print('      Register No - 1841013')
print('      Program 2 - Calculator\n')

import math

print(" 1. Simple Calculator\n 2. Scientific Calculator\n 3. Company Program\n Type 'done' if you are done")

d = 0

while d < 1:
  ch = input("\nChoose your calculation. ")
  if ch != 'done':
    if ch == '1':
      print("Simple Calculator\n")
      print("Please select operation:\n")
      print(" 1. Add\n 2. Subtract\n 3. Multiply\n 4. Divide\n \nEnter 'done' if you are done.")
      i = 0

      while i < 1:
        choice = int(input("\nSelect operations:"))

        if choice != 'done':
          num1 = float(input("\nEnter first number: "))
          num2 = float(input("Enter second number: "))

          if choice == 1:
            print("Result:", num1, "+", num2, "=", str(num1 + num2))

          elif choice == 2:
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        print("Result:", num1, "-", num2, "=", str(num1 - num2))

      elif choice == 3:
        print("Result:", num1, "*", num2, "=",  str(num1 * num2))

      elif choice == 4:
        print("Result:", num1, "/", num2, "=", str(num1 / num2))

      else:
        print("Invalid input. Please enter again.")

    else:
      i = i + 1
      break

elif ch == '2':
  print ("\nScientific Calculator")
  print('''
  Operator Available
  ^     for power
  r     for root
  %     for modulus
  pie   for Pie
  sin   for sin (trig)
  cos   for cos (trig)
  tan   for tan (trig)
  !     for factorial
  ln    for ln (log function)
  ''')
  opt = input("Enter the operator: ").lower()
  fnum = float(input("Enter first number: "))
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snum = float(input("Enter second number: "))

if opt == "^":
   print (fnum, "^", snum, "=", fnum ** snum)

elif opt == "r":
   print (fnum, "root", snum, "=", snum ** (1 / fnum) )

elif opt == "%":
   print (fnum, "%", snum, "=", fnum % snum )
#factorial

elif opt == "!":
   theNumber = fnum = snum
   snum = 1

   while fnum > 1:
      snum *= fnum
      fnum = fnum - 1
   print ("n!(", theNumber, ")=", snum )

elif op == "sin":
   print ("sin(", snum, ")=", math.sin(snum ))

elif op == "cos":
   print ("cos(", snum, ")=", math.cos
   (secondNumber ))

elif op == "tan":
   print ("tan(", snum, ")=", math.tan(snum ))
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    elif op == "pie" or op == "pi":
        print ("Pie =", math.pi)

    elif op == "ln":
        print ("ln(", snum , ")= ", math.log(snum))

    else:
        print ("incorrect operator")

  elif ch == '3':

    print("\nBank Application\n")
    rev = float(input("Enter company's year revenue."))
    sales = float(input("Enter the sales of the year."))
    exp = float(input("Enter the total expenses of the year."))
    i = 0

    while i < 1:
      print("\n 1. Calculate yearly profit and Quaterly\n 2. Check Growth \nType 'done' if your work is finished")
      che = int(input("\nChoose what you want to do."))

      if che != 'done':

        if che == 1:
          profit = rev - exp
          print("\nYour profit of this year is", profit)
          firstQ = profit/4
          print("\nYour company made a profit of Rs.", firstQ ,"in the first quarter.")

        elif che == 2:
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            if (profit < exp):
              print("\nCompany is growing keep working hard.")

            else:
              print("\nNeed more inprovemnt in finance management.")

          else:
            print("Invalid choice.")
            pass

        else:
          i = i + 1
          break

      else:
        print("Invalid Input")

  else:
    d = d + 1
    print("\nThank You")
    break
```