**calculator**

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**Code:**

class Calculator:

def \_init\_(self):

self.history = []

def add(self, num1, num2):

"""Add two numbers."""

result = num1 + num2

self.history.append(f"Added {num1} and {num2}. Result = {result}")

return result

def subtract(self, num1, num2):

"""Subtract num2 from num1."""

result = num1 - num2

self.history.append(f"Subtracted {num2} from {num1}. Result = {result}")

return result

def multiply(self, num1, num2):

"""Multiply two numbers."""

result = num1 \* num2

self.history.append(f"Multiplied {num1} and {num2}. Result = {result}")

return result

def divide(self, num1, num2):

"""Divide num1 by num2."""

if num2 == 0:

raise ZeroDivisionError("Cannot divide by zero!")

result = num1 / num2

self.history.append(f"Divided {num1} by {num2}. Result = {result}")

return result

def print\_history(self):

"""Print calculator history."""

for entry in self.history:

print(entry)

def main():

calculator = Calculator()

while True:

print("\n Calculator Menu:")

print("1. Add")

print("2. Subtract")

print("3. Multiply")

print("4. Divide")

print("5. Print History")

print("6. Quit")

choice = input("Choose an option: ")

if choice in ['1', '2', '3', '4']:

try:

num1 = float(input("Enter the first number: "))

num2 = float(input("Enter the second number: "))

except ValueError:

print("Invalid input. Please enter a number.")

continue

if choice == '1':

print(f"Result: {calculator.add(num1, num2)}")

elif choice == '2':

print(f"Result: {calculator.subtract(num1, num2)}")

elif choice == '3':

print(f"Result: {calculator.multiply(num1, num2)}")

elif choice == '4':

try:

print(f"Result: {calculator.divide(num1, num2)}")

except ZeroDivisionError as e:

print(str(e))

elif choice == '5':

calculator.print\_history()

elif choice == '6':

break

else:

print("Invalid option. Please choose a valid option.")

if \_name\_ == "\_main\_":

main()