# **Dynamic Calculator**

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## **Main Features**

* Can solve math problems with +, -, ×, ÷, and brackets ( ).
* Understands bracket multiplication like 3(2+1).
* Works with both whole numbers and decimal numbers.
* Very short and simple, written for beginners.

**Code:**

print("Dynamic Calculator")

while True:

exp = input("Write math problem: ")

exp = exp.replace("×", "\*")

exp = exp.replace("÷", "/")

exp = exp.replace(")(", ")\*(")

new\_exp = ""

for i in range(len(exp)):

if i > 0 and exp[i] == "(" and exp[i-1].isdigit():

new\_exp += "\*("

else:

new\_exp += exp[i]

try:

ans = eval(new\_exp)

print("Answer:", ans)

except:

print("Invalid input, try again")

**Code Explanation**

1. **Loop (while True)** The program keeps asking for new math problems until the user types "stop".
2. **Fixing Symbols**
   * × is changed into \*
   * ÷ is changed into /
   * )( is changed into )\*( so (2)(3) becomes (2)\*(3)
3. **Handling Numbers Before Brackets** The program looks for cases like 2(3+1) and changes it into 2\*(3+1).  
    This makes Python understand multiplication with brackets.
4. **Calculation** The eval() function solves the math expression and shows the result.
5. **Error Handling** If the user types something wrong, the program says "Invalid input, try again".