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Step 1: Problem Analysis

a. This is a problem about how can I crate a program to calculate two number with those operation: +, -, *, /, %, **. Also I need to crate a program, which can be used repeatedly. Moreover, I need to know the difference between each expression.

b. "+" means the sum of two numbers, for example 2+3=5. "-" means the difference between two numbers, for example 2-3=-1. "*" means the product of two numbers, for example 2*3=6. "/" means the division, so the first number is divided by the second number, for example 4/2=2. "%" means the remain by the first number is divided by the second number, for example 3%2=1. "**" means the power, for example 2**3=8.

Step 2: Program Design

1. Let Jacky = 1
2. Then make an input for num1 & num2 equal to a integer from the user.
3. After that choose the six choice among "+,-,*,/,%,**" is needed.
4. And then let x equal to any numbers I just set for "+,-,*,/,%,**".
5. Take the 2 numbers just chose, and use the operator on the numbers.
6. Output the final number, which is the answer.
7. Ask the user if to restart.

Step 4: Program Testing

1. Find 3 people to play the calculator.
2. Let all of them test some positive numbers and use all of expressions.
3. Let all of them test some negative numbers and use all of expressions.
4. Let them test some decimal numbers and use all of expressions.
5. Test if the user inputs the wrong commands.

```python
Jacky = 1;
while(Jacky == 1):
        num1 = int(input("Enter your first number: "));
        num2 = int(input("Enter your second number: "));
        print(" What kind of operation do you want to use?");
        print("1) +");
        print("2) -");
        print("3) *");
        print("4) /");
        print("5) %");
        print("6) **");
        x = int(input(" "));
        if(x == 1):
                print(num1 + num2);
        if(x == 2):
                print(num1 - num2);
        if(x == 3):
                print(num1 * num2);
        if(x == 4):
                print(num1 / num2);
        if(x == 5):
                print(num1 % num2);
        if(x == 6):
                print(num1 ** num2);

        Jacky = int(input(" Would you like to continue? (0 - no,
    1 - yes): "));
```